Program Evaluation of the Hennepin County

Mental Health Court, 2014-2017

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Executive Summary

- This evaluation explores the outcomes of the Hennepin County District Court Mental Health Court (MHC) program. The following are key findings and recommendations from the evaluation, which focuses on 330 Mental Health Court participants active in the program between 2014 and 2017. The graduation rate of the evaluation cohort was just under 45%.
- Unlike Drug Court and DWI Court, where the criminal offenses and risk levels are similar, participants in Mental Health Court enter the program with a variety of different offenses and criminal histories. The unifying factor in Mental Health Court is that all participants must have a diagnosis of a serious and persistent mental illness.
- Day-to-day operations of Mental Health Court are largely carried out by the Mental Health Court Team (MHC Team hereafter), composed of the Mental Health Court Judge, Treatment Court Coordinator, Court Clerk, Department of Community Corrections and Rehabilitation (DOCCR) Probation Officers, DOCCR Corrections Unit Supervisor, Hennepin County Human Services and Public Health Department (HSPHD) Social Workers, Assistant Hennepin County Attorney, Assistant Minneapolis City Attorney, Hennepin County Public Defender, and a Park Avenue Treatment Center representative
- Hennepin County Mental Health Court has seven goals:
    - Reduce Criminal Recidivism: Using a two-year recidivism window that extended through December 31, 2019, the MHC participants did not recidivate at lower rates than a statistically identical group of individuals who went through the traditional criminal court process in Hennepin County. However, MHC graduates had a statistically significant reduction in reoffending compared to a matched comparison group, suggesting the program does help some participants reduce recidivism.
    - Increase compliance with court ordered conditions: Most participants do not garner new criminal charges, new criminal convictions, or have probation violation warrants issued to them during the program. Graduates and non-completers receive less failure to appear warrants during MHC compared to the year before MHC. Almost three-in-ten participants are never required to submit a drug/alcohol test, including some participants with a diagnosed Substance Use Disorder. The program might consider increasing the scope of random drug/alcohol testing to meet national best

practice standards. Having at least one failed drug/alcohol tests is associated with lower odds of graduation.

- Improve life stability: Overall, MHC participants exited the program with higher levels of housing stability, greater levels of employment, and many individuals increased their educational attainment. However, program graduates enjoyed the bulk of these gains. There is a statistically significant relationship between employment status and program outcomes, whereby individuals who are unemployed from start-to-finish or become employed during MHC are less likely to graduate the program. The program could increase employment services for participants who enter the program as unemployed or become unemployed during MHC participation.
- Reduce hospitalizations and emergency room visits: Hospitalizations for mental health related reasons and emergency room visits for mental health crises are rare occurrences for MHC participants during active participation, suggesting the program is achieving this goal.
- Reduce jail time: Program graduates significantly reduced jail days during MHC compared to the year before acceptance to MHC. Individuals who failed to complete the program spent, on average, more days in jail during MHC compared to the year before acceptance to MHC.
- Facilitate access to services: The program is doing a good job of matching participants to community services and supports. Connection to adult rehabilitative mental health services (ARHMS), community support programs (CSP), and crisis services enhance program success. The program matches graduates to more services than non-completers and could work to increase services for all participants.
- Increase participant satisfaction with court process: Participants express high levels of satisfaction with the program overall, the MHC judge, and their probation officer. Participants report that the program functions well for them.

- Mental Health Court has two tracks, one for individuals facing felony level charges and another for individuals facing misdemeanor and gross misdemeanor charges. There are statistically significant differences between the two tracks.
    - Participants on the felony level track have higher graduation rates compared to individuals on the misdemeanor/gross misdemeanor track.

    - In the misdemeanor/gross misdemeanor track, participants from communities of color graduate at significantly lower rates than do White participants.
- Participants entering the program with more extensive criminal histories are less likely to graduate from program, and the MHC Team could provide these participants with a more robust level of supervision from the start.
- Regression analysis revealed a statistically significant difference in the odds of MHC graduation between individuals with and without certain in-program violations. Specifically, participants with at least one warrant for failing to appear at a review hearing, at least one positive drug/alcohol test, and/or a new criminal charge were less likely to graduate. In response to these occurrences, the program could provide additional levels of supervision and support to individuals who receive new criminal charges during MHC, individuals who fail to appear at a MHC review hearing and individuals who fail at least one alcohol/drug test.
- Missing participant data was a limitation of this evaluation for certain parts of this analysis. To overcome this the Fourth Judicial District Research Team and the MHC probation officers could work together to develop new methods of gathering and transmitting participant data on a real-time basis.

Introduction

Since the inception of Drug Courts in the early 1990s, specialized treatment courts focusing on providing treatment and a heightened level of judicial review for program participants have expanded in number and scope. At their most basic, the overarching aim of specialty courts is to address participants' legal issues as well as their chemical dependency and mental health needs simultaneously. Through up-front investments in the participants combined with participant commitment to incorporate positive behavioral changes, these programs hope to facilitate long-term improvements for participants through reduced subsequent contact with the criminal justice system and enhanced mental and chemical health outcomes.

Historically, "People with mental illnesses often cycle repeatedly through courtrooms, jails, and prisons that are ill-equipped to address their needs and, in particular, to provide adequate treatment."[1] Modeled after Drug Courts, Mental Health Courts began appearing in the 1990s as a way to address the increase in individuals in the criminal justice system with unmet mental health needs and to sever the link between mental illness and repeated interaction with the criminal justice system. Although the specifics of individual Mental Health Courts vary considerably, "Mental health courts generally share the following goals: to improve public safety by reducing criminal recidivism; to improve the quality of life of people with mental illnesses and increase their participation in effective treatment; and to reduce court- and corrections-related costs through administrative efficiencies and often by providing an alternative to incarceration."[2] As of 2015, there were approximately 350 Mental Health Courts in the United States.[3]

Hennepin County District Court initiated its Mental Health Court in May of 2003, the first of its kind in the state of Minnesota. The Hennepin County Mental Health Court remains the largest Mental Health court in Minnesota. Between 2014—when Hennepin County District Court began keeping systematic records of participants[4]—and the end of 2019, there were over 2,600 referrals to Mental Health Court. Mental Health Court accepted over 1,150 of these referrals. The graduation

[1] Alquist and Dodd, 2009: v
[2] Alquist and Dodd, 2009: v
[3] Andrews, 2015
[4] In 2014, the Hennepin County District Court Research Department began keeping participant records in its own Treatment Court database, combining participant data from the courts, probation, and public health. Prior to this, justice partners on the Mental Health Court Team tracked participant outcomes and statistics.

rate during this period was just under 50%. This graduation rate compares favorably to the average graduation rate of Mental Health Courts of about 52%.[5] However, given that Mental Health Courts in different jurisdictions have vastly different eligibility criteria and program requirements, graduation rates of Mental Health Courts nationwide vary wildly, from 19% to 81%.[6] More generally, Drug Court graduation rates range between 50% and 57% in the United States.[7]

The Hennepin County District Court Research Division conducted an evaluation of the Mental Health Court program in 2006, which found reductions in recidivism over a four-month period. However, the program was too new in 2006 to conduct a more thorough program evaluation since most program participants would have just completed the program and would have been on their own for a short time. Although individuals on the MHC Team have conducted program reports for grant reporting purposes,[8] there have been no further evaluations of the Hennepin County Mental Health Court in the ensuing fifteen years, making now an ideal time to conduct a more comprehensive evaluation.

The following document provides a full-scale program evaluation of the Hennepin County District Court Mental Health Court (MHC hereafter) by determining the degree to which the program is meeting its stated goals. This study begins with an overview of the program, which describes the program's goals and mission, the process of referral and acceptance, and how participants proceed through the program. In addition, we present the eligibility criteria for the evaluation cohort, the research methods used, and the limitations of this analysis. Next, we present a robust overview of the 302 participants in the evaluation sample, examining participant demographics, criminal history, and mental health background. After a description of the participants, this study analyzes the degree to which the program is succeeding in meeting its stated goals. We then run a regression analysis to uncover the factors that make success in MHC more or less likely. This evaluation concludes with a series of recommendations and proposed policy refinements based on this analysis meant to enhance the potential success of the program.

[5] Hiday et al, 2014
[6] Herinckx et al., 2005; Redlich et al., 2010; Hiday et al, 2014; Cissner et al, 2018; Fisler 2015
[7] Huddleston et al, 2008
[8] See:.Merkel et al, 2012

Overview of the Hennepin County District Court Mental Health Court Program

The mission of the Hennepin County MHC is to address the unmet mental health needs of defendants and to increase public safety.

The goals of the program are to:

1. Reduce criminal recidivism
2. Increase compliance with court ordered conditions
3. Improve life stability
4. Reduce hospitalizations and emergency room visits
5. Reduce jail time
6. Facilitate access to services
7. Increase participant satisfaction with court process

Hennepin County MHC is a voluntary program that utilizes a multi-faceted approach to address the needs of participants. Program components include intensive supervision by probation, referral and case management services provided by the MHC Team and community agencies, frequent appearances before the MHC Judge, mandatory chemical health and/or mental health treatment, regular attendance at self-help/support groups, and frequent random drug testing. Participants who complete the program successfully may receive reduced criminal charges or avoid a conviction altogether. Upon completion, the program encourages and offers access to continuing care and aftercare services.

<u>Eligibility and Disqualification Criteria</u>

The target population for Hennepin County MHC is offenders charged with crimes committed in Hennepin County, who live in Hennepin or Ramsey County (or are the fiscal responsibility of one of those counties), and who have a qualifying diagnosis that significantly impairs their lives.

The eligibility criteria for the Hennepin County MHC are as follows:

- The defendant is a Hennepin or Ramsey County resident.
- The defendant must agree to participate.
- The defendant must be at least 18 years of age.
- The defendant is facing criminal charges in Hennepin County.

- Prosecutor, Defense Attorney, Defendant, and Referring Judge must consent to the referral to MHC. The MHC Judge must also agree to admission.
- The defendant must have a serious and persistent mental illness (SPMI) with a diagnosis of schizophrenia, schizoaffective disorder, bipolar disorder, major depression, borderline personality disorder, traumatic brain injury, or intellectual development disorder.
    - The diagnosis must also create a significant impairment in the defendant's functioning and the defendant must demonstrate a current need for (additional) intervention and be willing to participate in services.
- The defendant must not dispute the legal or factual basis of the criminal charges.

Certain factors preclude defendants from participation in the program. Specifically, defendants are not eligible for the Hennepin County MHC if:

- The current charge will result in a felony criminal sexual conduct conviction, or the defendant is currently under probation supervision for a criminal sexual conduct case.
- The defendant has been identified as a Level 3 Predatory Offender as determined by the Minnesota Department of Corrections.
- The current charge is a non-felony domestic-related offense involving an intimate partner.
- The current charge is a solicitation of a Minor, Sex Trafficking/Promotion of Prostitution (Statute 609.322); Prostitution (Statute 609.324, only any subdivision that involved ages 15 and under); and Child Pornography (Statute 617.247).
- The defendant is on supervised parole or conditional release following a prison commitment.
- The defendant already has social services in place and has no need for additional services.
- The MHC Team can refuse admission to defendants who pose a potential threat to the other participants in the program.
- The defendant is facing a mandatory or presumptive prison sentence.

Referral and Acceptance Process

The referral process to MHC is multi-pronged and consists of several steps. The first step is a referral to Mental Health court upon the recommendation of attorneys, the defendant, and the referring judge. At the individual's first MHC appearance, the defendant observes the court session, talks with a social worker who sets up screening appointments, and signs a release of information. During this initial appearance, the court gives the defendant a second appearance date in MHC.[9]

Between the first and second MHC appearances, a group of social workers and probation officers collaborate on an assessment by:

a. Interviewing the defendant, seeking appropriate collateral information, reviewing and gathering records to obtain prior legal, psychosocial, medical, behavioral health and chemical health history.
b. Determining whether the defendant has a qualifying diagnosis (see Eligibility and Disqualification Criteria) and has significant impairment to benefit from intensive services.
c. Writing a screening memo that advises the judge and attorneys as to whether the defendant and case meet MHC criteria. The Court Screening Team makes a recommendation as to whether or not the Court should accept the defendant. The Court Screening Team may postpone making a recommendation on acceptance pending an appointment with the psychiatrist or review of additional existing records.
d. Throughout the screening process, the Court Screening Team works collaboratively to individualize treatment plans and make appropriate referrals to community resources and services.

When defendant returns to MHC, the MHC Team decides whether to accept the defendant and offer placement in MHC (contingent upon the attorneys and the original judge agreeing to send the defendant to MHC). If the MHC Team accepts the defendant, the social worker, probation officer, and the defendant collaborate on a case plan. The individual signs the Participant Agreement and the Court assigns a supervising probation officer. The social worker assists to arrange appropriate services to help complete conditions.

[9] If the case is a felony other than property or non-presumptive commit drug case, the defendant returns to the referring judge for sentencing with the MHC's decision. If sentenced by the referring judge to MHC, the defendant returns to MHC the week after sentencing to sign the Participant Agreement and receive a supervising probation officer.

If the defendant is not accepted, the case returns to the originating calendar and proceeds through the normal criminal court process.

The disposition of a case in MHC depends on the nature of the case, the defendant's criminal history, and the performance of the defendant. The intent of the Court is to diminish the negative impact of incarceration on those with severe mental health issues. Mental Health Court utilizes non-incarceration sentences whenever possible.

Mental Health Court Process

The creation of policies guiding the day-to-day operations of the programs and the carrying out of these policies are the responsibilities of two different—but often overlapping—teams: The Steering Committee and the Mental Health Court Team.

Mental Health Court Judge

At any time, there is a single judge presiding over MHC, as per NADCP best practices. Typical tenure for a MHC judge in Hennepin County is three years, at which time they rotate to a new assignment. Any judge in the county is eligible to preside over a Hennepin County treatment court. Between 2003 and the present, five judges have presided over MHC. The evaluation period in this study contains the tenures of two MHC judges, one of whom presided over MHC from 7/30/13 to 1/2/2017, and another who began their rotation on 1/3/17. Since the evaluation concludes with participants who left before the end of 2017, the first judge presided over three years and the second over the final year of the evaluation.

Steering Committee

The Steering Committee is responsible for facilitating the MHC process, implementing policies and procedures, resolving issues and conflict, and providing community support and buy-in. The Steering Committee includes representatives from the Fourth Judicial District Court: judge, coordinator, researcher, criminal division administration; Hennepin County Attorney's Office, Hennepin County Public Defender's Office, Minneapolis City Attorney's Office, Hennepin County Department of Community Corrections and Rehabilitation, Hennepin County Human Services and Public Health Department, Hennepin County Sheriff's Office, Minneapolis Police Department, and

a representative of the Suburban Prosecutors' Association. Traditionally, the Steering Committee has met monthly or bi-monthly.

Mental Health Court Team

The MHC Team consists of individuals representing their respective agencies that carry out the daily tasks involved in operating the Court and includes the MHC Judge, Treatment Court Coordinator, Court Clerk, DOCCR Probation Officers, DOCCR Corrections Unit Supervisor, Hennepin County Human Services and Public Health Department (HSPHD) Social Workers, Assistant Hennepin County Attorney, Assistant Minneapolis City Attorney, Hennepin County Public Defender, and a Park Avenue Treatment Center representative. Additionally, a Psychiatric Social Worker, Psychiatric Nurse, and Psychiatrist support the Mental Health Court Team.[10] For the remainder of this evaluation, we will refer to the Mental Health Court Team as the MHC Team.

The MHC Team meets weekly before court to discuss participants' progress, and MHC Team members attend the weekly court sessions. The MHC Team is responsible for determining whether to accept a defendant based on the eligibility and disqualification criteria discussed above. The MHC Team is also responsible for monitoring participants' adherence to the program.

Although the MHC Team provides input regarding sanctions and terminations, the MHC judge is solely responsible for imposing sanctions for non-compliance.

Review Hearings

Mental Health Court sessions occur three times per week. Except under extraordinary circumstances, participants only appear in court at regularly scheduled intervals. The frequency of these court appearances largely depends upon how long the participant has been in MHC and how well the participant is faring in the program. The goal is that review hearings become less frequent the longer a participant is active in MHC and complies with program requirements.

At review hearings, the judge typically spends several minutes hearing updates from the participant and the participant's probation officer. While the judge can reward positive behavior with incentives,

[10] For the roles and responsibilities of the MHC Team members, please see the *Hennepin County MHC Policy and Procedure Manual,* pp. 5-6

the judge also has the authority to sanction participant behavior that runs counter to court requirements. Specifically, once in MHC, all participants must:

- Sign all releases of information
- Remain law abiding
- Abstain from alcohol or non-prescribed drugs
- Attend all court appearances and be on time
- Take all medication as prescribed and keep Probation Officer informed of all medications prescribed
- Comply with an individualized Care plan as outlined by the social worker and probation officer (e.g. mental health, substance abuse, domestic violence or anger management)
- Maintain contact with probation.
- Submit to drug and alcohol testing as ordered by the Court and directed by probation.
- Cooperate with unscheduled home visits by probation and law enforcement
- Coordinate medical care with primary physician/psychiatrist and multi-discipline team
- Pay fines, fees and restitution as ordered by the Court
- Reside in Hennepin or Ramsey County with accessibility to the Court, probation, and Mental Health services
- Do not function as a police informant while involved in the program
- Inform the Court and probation of phone and address changes
- Complete sentence to service or community service, as ordered
- Participate in training and education, as ordered
- Seek stable and sober housing – reside in supportive housing, if ordered
- Adhere to a curfew, as ordered
- Do not use or possess firearms
- Be respectful to the MHC Team and other MHC participants at all times

While failure to comply with these provisions can lead to sanctions up to and including termination from the program, participants adhering to these requirements and making satisfactory progress advance towards graduation.

Graduation Requirements

In order to successfully graduate from MHC, participants must have resolved all pending cases, have no new criminal charges for at least six months, and demonstrated sobriety for at least 90 days. Participants should take medications as prescribed, have stable housing, engage with community providers, and be involved in activities such as employment, education, or community service. All specific conditions ordered by the judge must be successfully completed or well established before graduation.

Upon graduation, a participant enters administrative probation for the remainder of their probation term. The administrative probation conditions will always include a requirement that the participant remain law abiding. When the original offense was alcohol or drug related, the terms of administrative probation will also include no use of alcohol or non-prescribed drugs. There is no direct reporting to the Court while on administrative probation.

Termination Criteria

If a participant in MHC has been absent from the program for one year, he or she will be placed on a MHC calendar and the situation discussed by the MHC Team. After input from the MHC Team, the judge will determine whether to terminate the participant from the program. If a terminated participant returns to Hennepin County District Court after an extended absence, the case goes to MHC. At that time, the defendant may request re-instatement to the program. The judge, with input from other individuals on the MHC Team, will decide whether to re-engage the defendant and what sanction to impose for the extended absence.

The MHC Team may also terminate participants from MHC for failing to comply with program requirements after the MHC Team has attempted to improve motivation and compliance without success. Participants may also request execution of their sentence. Upon termination from MHC, the judge decides the appropriate sanction.

Program Evaluation

In order to ensure that MHC is meeting the goals stipulated in the Policy and Procedure Manual, the Hennepin County District Court Research Department will conduct evaluations at regular intervals. The remainder of this document contains a thorough outcome evaluation of program participants.

Research Design

At its most basic, the purpose of this evaluation is to determine whether the MHC is meeting the seven goals named on page four.

The Sample

Prior MHC participants must meet several criteria for inclusion in the evaluation cohort. First, the MHC Team must have accepted the participant between January 1, 2014 and December 31, 2016. Furthermore, in order to have a sufficiently long recidivism window, these individuals must have exited the program on or before December 31, 2017. In total, 384 individuals met these time period criteria. However, 54 of these individuals were not included in the evaluation sample for one of three reasons.

First, we excluded 43 individuals who had multiple tenures in MHC. In certain circumstances, the MHC Team allows individuals who have previously participated in the program to participate a second or third time. We chose to exclude these individuals from the evaluation cohort for two primary reasons. On the one hand, it is highly likely that individuals with a prior tenure in MHC are qualitatively different from individuals entering the program for the first time. Prior participants are more likely to have connections to community resources, are more likely to have access to mental health services, are more likely have an established relationship with a MHC probation officer, and are more likely to understand the structure of MHC. As a result, these individuals enter the program on different footing than new referrals. On the other hand, including individuals with a second tenure in MHC could dramatically affect outcomes during the recidivism window. If, for example, an individual in the evaluation cohort were to participate a second time in MHC during their recidivism window, they would be receiving supervision, structure, and services that would likely make them less likely to recidivate compared to individuals on regular or administrative probation. Given the differences between individuals who only participate once and individuals with multiple tenures, we restrict our sample to individuals who have not previously participated in MHC, and who do not reenter the program during the recidivism window.

Second, several individuals sadly passed away during program participation or shortly after leaving MHC. Since in-program and/or post-program data are unavailable for these individuals, we did not include these six individuals in our final sample.

Finally, missing data was a limitation to this evaluation. Mental Health Court began collecting data on participants at the start of 2014, but data collection procedures were unsystematic early on and separated between three or more departments. As a result, some participants had no or extremely limited data. Instead of asking the probation officer of these participants to attempt to recall numerous specific data points from several years ago, we opted to drop the five individuals with no/extremely limited entry or exit data from the sample.

After considering these additional criteria, the final evaluation sample consists of 330 MHC participants.

Methods

This study evaluates the effectiveness of the Hennepin County Mental Health Court program using a variety of methods. At the most basic level, this study shows the longitudinal arc of program participants from acceptance to exit, contrasting participants with themselves before and after MHC. Specifically of interest is the degree to which MHC participants improved certain life quality metrics, such as employment status, housing status, educational attainment, and prosocial activities/relationships, in accordance with the program's stated goals.

For the program goal of reducing criminal recidivism, this study examines whether program participants had fewer post-MHC convictions than a comparison group of similarly situated criminal offenders. As explained below, we used the propensity score matching technique to match the MHC evaluation cohort to a group of Hennepin County criminal offenders ordered to complete a mental health evaluation based upon the recommendations of the pre-sentence investigation report. Having a similarly situated comparison group allows us to determine whether there was a beneficial "program effect" of the Hennepin County MHC program with respect to post MHC offending patterns.

This study also analyzes the factors—both how participants present at program entry and features of the program—that predict program success or failure via regression analysis. Understanding the program features that enhance or diminish participants' prospects for success can help the Hennepin County MHC tailor its policies, procedures, and services to give every participant a greater opportunity to graduate.

Data Collection and Sources

Data for this evaluation come from a variety of sources:

- The *Hennepin County Mental Health Court Policy and Procedure Manual*: This document explains the processes of referral and acceptance to the program, the team structure, as well as the basic outlines of how the program works. As the guiding document for how the program should function in practice, the Manual allows us to discern the degree to which the MHC Team follows MHC policies and procedures and whether these policies need fine tuning in response to the outcomes in this study.
- Minnesota's Court Information System (MNCIS): Demographic and criminal case information for the MHC cohort and the comparison group come from MNCIS. We used this statewide database to compile information on criminal history, in-program offending, and recidivism outcomes for both groups.
- Hennepin County District Court Research Department Treatment Court Database: In late 2015, the Hennepin County Research Department developed a database containing information for former and current participants in all four of Hennepin County's treatment courts (Veterans, Criminal Mental Health, DWI, and Drug). This database houses an extensive array of participant information such as mental health history, current mental health and chemical dependency diagnoses, and quality of life metrics (i.e. housing status, employment status, education status, etc.). The data in this database comes from multiple sources:
    - Mental Health Court Screening Documents. As mentioned above, a member of the Court Screening Team screens individuals referred to MHC. These screening documents include information about participants' current mental health status, mental health history, as well as participants' quality of life metrics at program entry.
    - Probation data questionnaires: In order to get ongoing participant information after MHC accepts participants, each participant's probation officer fills out a quarterly data questionnaire which records progress in the program and whether participants began or completed mental health and/or chemical dependency treatment. Probation officers also fill out a data form at program exit to document participants' most recent mental health and chemical dependency diagnoses, quality of life metrics at program exit, and services to which the MHC program connected participants.

- Court Services Tracking System (CSTS): The Hennepin County Department of Community Corrections and Rehabilitation (DOCCR) stores information about individuals on probation in their information system named CSTS. While this system primarily provided information about drug test results, the detailed client case notes written by probation officers help corroborate participant data and/or find data missing from screening documents or quarterly questionnaires.

Limitations

One large limitation of this study is that the Research team was unable to procure actual mental health diagnoses of the comparison group (explained in more detail below). Mental Health Court participants sign a consent form allowing the MHC Team access to a host of data about program participants. Because the individuals in the comparison group did not consent to any type of data sharing, their protected information remains private. As a result, we must rely on a proxy (as a reminder, findings from the presentence investigation report) for individuals in the comparison group having a serious and persistent mental illness (SPMI), which, as noted above, is a key qualifying criterion of MHC. In addition, we could not get data on housing status, employment, or education history for the comparison group. As such, we can only use the comparison group to discern recidivism differences between the two groups. We do not use the comparison group to evaluate other outcomes, such as quality of life metrics.

Missing data is also a salient limitation of this study. As mentioned above, several MHC participants who met the date criteria for this evaluation were ineligible to be in the evaluation cohort because the Hennepin County District Court Research Team had no data regarding their mental health histories and quality of life metrics when they entered and exited the program. In addition, many individuals in the evaluation cohort had most of their data in place, but were missing data for one or many data points at MHC entry or exit. These missing data points were more of an issue for individuals who did not complete the program than for MHC graduates. Some non-completers, for instance, lose touch with their probation officer. Oftentimes, MHC does not terminate these individuals for several months of no contact, at which time probation officers are unaware of participants' data at program "exit," such as employment status, housing situation, education attainment, and current mental health diagnoses. As a result, post-program data is more complete

for MHC graduates, which could make the program appear more successful than it is since graduates tend to have better outcomes than non-completers. As described below, we took measures to ensure that we account for missing data when examining participants' trajectory on measures related to the MHC goals such that the proportions of graduates and non-completers in these goal assessments match the full evaluation cohort.

A final limitation is the recidivism window for Goal 1 below. The Best Standards Practices of the National Association of Drug Court Professionals (NADCP) suggests a three-year window for determining post-treatment court offending. Oftentimes, there is a tradeoff when considering the size of the evaluation cohort and the recidivism window. Including more individuals in the evaluation cohort—thereby increasing the number of data points and the reliability of the data analysis—means extending the end date of the eligibility window. Doing so, however, infringes on the post-program window. For the present analysis, we did not gather data on Mental Health Court participants before 2014, which limited the number of individuals eligible for the evaluation cohort. In order to maximize the number of individuals in the evaluation cohort, we extended the eligibility window to include participants who entered the program in 2017 and exited MHC before December 31, 2017. Given these date parameters, the only feasible option was a two-year recidivism window that extended through December 31, 2019.

Descriptive Statistics of the Mental Health Court Evaluation Cohort

The evaluation begins with an in-depth overview of the characteristics of the evaluation cohort. In the descriptive statistics presented below, we present data of the full cohort as well as breakdowns between MHC graduates and non-completers.

Of the 330 individuals in the MHC evaluation sample, 148 individuals graduated successfully while 182 individuals failed to complete the program. This yields a graduation rate of 44.8%.

Starting with demographic information of the evaluation cohort, the final column of Table 1 shows a near two-thirds to one-third split between males and females. While male participants outnumber female participants, a higher proportion of female participants graduate from the program. Specifically, about 50% of female participants complete the program while about 42% of male participants graduate. However, this difference is not statistically significant.

Table 1: Gender Breakdown of Mental Health Court Cohort

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
Female	61 (50.4%)	60 (49.6%)	121 (36.7%)
Male	121 (57.9%)	88 (42.1%)	209 (63.3%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

Table 2 contains self-reported race information about the sample.[11] The rightmost column shows a plurality of the MHC cohort is Black (47.9%) with the White individuals also comprising a significant portion of the evaluation cohort (35.8%). No other race group comprised more than 6% of the evaluation cohort, suggesting the full sample overwhelmingly identifies as Black or White. The data show statistically significant differences in graduation rates by race. Black individuals are far more likely to not complete the program (64.6% do not complete), while White individuals are more likely to graduate from the program (56.8% graduate). Although the numbers are small, Native American participants have the lowest graduation rate (25.0%) while Latino participants have one of the highest graduation rates (60.0%).

[11] Procedurally, defendants self-report their race via a questionnaire at their first court appearance. We used DOCCR race data for participants whose race data was unavailable in their court files.

Table 2: Race and Ethnicity Breakdown of Mental Health Court Cohort***

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Black	102 (64.6%)	56 (35.4%)	158 (47.9%)
Asian	3 (50.0%)	3 (50.0%)	6 (1.8%)
Native American	9 (75.0%)	3 (25.0%)	13 (3.6%)
Hispanic/Latino	4 (40.0%)	6 (60.0%)	10 (3.0%)
Multiracial	10 (52.6%)	9 (47.4%)	19 (5.8%)
Some Other Race	1 (25.0%)	3 (75.0%)	4 (1.2%)
White	51 (43.2%)	67 (56.8%)	118 (35.8%)
Unknown Race	2 (66.7%)	1 (33.3%)	3 (0.9%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

*** Difference between non-completers and graduates statistically significant at the $p < .05$ level

Since several of the race groups have relatively few participants, Table 3 below bifurcates the sample into whether the participant identifies as White or as a Person of Color (POC). A bit over a third of the sample identifies as White (35.8%) and just under two-thirds identifies as a POC (63.6%). Similar to the graduation rate disparities found in Table 2, Table 3 also demonstrates statistically significant differences in graduation rates by race. Once again, while about 57% of White participants graduate, less than four-in-ten POC graduate. We unpack the racial disparity in graduation rates in more depth below (see Table 12 and Figures 1 through 3).

Table 3: Racial Category Breakdown of Mental Health Court Cohort**

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
White	51 (43.2%)	67 (56.8%)	118 (35.8%)
Person of Color	129 (61.7%)	80 (38.3%)	209 (63.6%)
Unknown	2 (0.0%)	1 (100.0%)	3 (0.9%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

** Difference between non-completers and graduates statistically significant at the $p < .01$ level

Table 4 presents descriptive statistics about the age of the evaluation cohort. The average age of the sample was 35.7 years old. Graduates skewed slightly older than non-completers (37.5 to 34.3), but

the difference is not statistically significant. The youngest participant in the evaluation cohort was 18 while the oldest was 69.

Table 4: Average Age of Mental Health Court Cohort***

	Did not Complete	Graduated	Overall
Average Age	34.3	37.5	35.7
Minimum/Maximum	Min:18, Max: 61	Min:19, Max: 69	Min: 18, Max: 69
	N= 182	N=148	N=330

*** Difference between non-completers and graduates statistically significant at the $p < .05$ level

Table 5 looks at the age of the evaluation cohort broken down into age brackets. Overall, the largest proportion of participants was in the 18-25 age range (23.3%), followed by the 39-49 bracket (20.3%). Table 5 also shows non-statistically significant relationship with age and program outcome. The graduation rate is the lowest for the youngest age cohort (39.0%), which increases in a linear manner such that the oldest age group has the highest graduation rate (50.9%).

Table 5: Age Group Breakdown of Mental Health Court Cohort

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
18-25	47 (61.0%)	30 (39.0%)	77 (23.3%)
26-30	38 (58.5%)	27 (41.5%)	65 (19.7%)
31-38	35 (54.7%)	29 (45.3%)	64 (19.4%)
39-49	34 (50.7%)	33 (49.3%)	67 (20.3%)
50 +	28 (49.1%)	29 (50.9%)	57 (17.3%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

Table 6 below displays the primary mental health diagnoses of participants at MHC entry. While many participants have additional mental health diagnoses than those presented below (e.g. Posttraumatic Stress Disorder or Generalized Anxiety Disorder), the diagnoses in Table 6 represent the array of diagnoses potential participants must present with in order to be eligible for MHC. The numbers in the "total" row exceeds the number of non-completers, graduates, and total number of participants because 38.5% of the evaluation cohort enters the program with more than one primary diagnosis.

Table 6: Primary Mental Health Diagnosis Status at Mental Health Court Entry

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
Bipolar Disorder	52 (50.5%)	51 (49.5%)	103 (21.4%)
Borderline Personality Disorder	37 (61.7%)	23 (38.3%)	60 (12.5%)
Intellectual Development Disorder	14 (60.9%)	8 (39.1%)	23 (4.8%)
Major Depressive Disorder	94 (56.6%)	72 (43.4%)	166 (34.5%)
Schizoaffective Disorder	17 (47.2%)	19 (52.8%)	36 (7.5%)
Schizophrenia	39 (58.2%)	28 (41.8%)	67 (13.9%)
Traumatic Brain Injury	17 (65.4%)	9 (34.6%)	26 (5.4%)
Total	268 (56.1%)	208 (43.9%)	481† (100.0%)

† Total exceeds number of participants because each individual can have multiple services

The proportion of the total number of diagnoses that each group had was slightly different overall non-completer/graduate split: non-completers had 56.1% of all diagnoses while graduates had 43.9% of all diagnoses (whereas the non-completer/graduate split was 55.2% and 44.8%, respectively). The rightmost column shows that Major Depressive Disorder is the most common diagnosis at program entry with just over one-third of participants (34.5%) presenting with that particular diagnosis. Bipolar Disorder, Schizophrenia, and Borderline Personality Disorder are the next three common diagnoses at entry (21.4%, 13.9%, and 12.5% respectively). For the most part, non-completers had higher proportions of individuals with each diagnosis, save for Schizoaffective Disorder.

One goal of MHC is to increase life stability. A way to measure this outcome is through comparing employment status at program entry and exit. Although there is a section devoted to this goal below (see Tables 26 and 27 below), Table 7 shows the employment status of participants as they enter MHC. Overall, there are statistically significant differences in program outcomes by employment status at program entry, whereby program graduates have higher rates of employment at MHC entry and non-completers are more likely to be unemployed. The rightmost column shows the vast majority of participants enter the program unemployed (76.7%). Of the 253 individuals who enter the program unemployed, about 42% eventually graduate. The second most common employment status at program start is part-time employment (12.1% of the full sample), and 57.5% of these individuals eventually graduate.

Table 7: Employment Status at Mental Health Court Entry ***

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Full-time	3 (37.5%)	5 (62.5%)	8 (2.4%)
Part-time	17 (42.5%)	23 (57.5%)	40 (12.1%)
Retired	0 (0.0%)	3 (100.0%)	3 (0.9%)
Homemaker	0 (0.0%)	1 (100.0%)	1 (0.3%)
Disabled	9 (45.0%)	11 (55.5%)	20 (6.1%)
Unemployed	148 (58.5%)	105 (41.5%)	253 (76.7%)
Unknown	5 (100.0%)	0 (0.0%)	5 (1.5%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

** Difference between non-completers and graduates statistically significant at the $p < .05$ level

Table 8 displays the housing status of participants at program entry and shows statistically significant differences by program outcome. The final column shows a plurality of the cohort enters the program living with a relative or friend (36.7% of the full sample), and just under four-in-ten of these individuals ultimately graduate (38.8%).

Table 8: Housing Status at Mental Health Court Entry *

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Independent	30 (37.0%)	51 (63.0%)	81 (24.5%)
Relative/Friend	78 (62.4%)	47 (37.6%)	125 (37.9%)
Residential Facility	9 (34.6%)	17 (65.4%)	26 (7.9%)
Correctional Facility	7 (77.8%)	2 (22.2%)	9 (2.7%)
Homeless	58 (66.7%)	29 (33.3%)	87 (26.4%)
Unknown	0 (0.0%)	2 (100.0%)	2 (0.6%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

Over a quarter of the evaluation cohort entered the program as homeless (26.4%), and a third of these individuals eventually graduate MHC (33.3%). Just under a quarter of participants enter the program living independently (24.5%), and the majority of these individuals complete the program

successfully (63.0%). Taken together, the data show that graduates have more stable housing than non-completers at program entry.

Table 9 displays participants' education status at MHC entry. The final column shows it was most common for participants to enter the program with no high school diploma (34.2%), followed by individuals holding a high school diploma or GED (32.4%), and individuals having some college but no degree (21.8%). The data show statistically significant differences in program outcomes based upon educational attainment at program entry, whereby individuals with more formal education appear to graduate at higher rates, which we analyze in greater depth below (See Tables 30 and 31 below). Specifically, the graduation rates of individuals who did not graduate high school and who have a high school diploma/GED are below the graduation rate of the overall sample. In contrast, individuals with at least some college, a two-year degree, a four-year degree, or a post graduate/professional degree graduate MHC at a higher rate than the sample average.

Table 9: Education Status at Mental Health Court Entry ***

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Post graduate/professional degree	1 (33.3%)	2 (66.7%)	3 (0.9%)
4-year degree	4 (26.7%)	11 (73.3%)	15 (4.5%)
2-year degree	8 (53.3%)	7 (46.7%)	15 (4.5%)
Some college but did not graduate	33 (46.5%)	39 (53.5%)	72 (21.8%)
High school graduate/GED	60 (55.6%)	47 (44.4%)	107 (32.4%)
Did not graduate high school	71 (62.8%)	42 (37.2%)	113 (34.2%)
Unknown	5 (100.0%)	0 (0.0%)	5 (1.5%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

*** Difference between non-completers and graduates statistically significant at the $p < .05$ level

Individuals enter MHC charged with a wide variety of criminal offenses. Table 10 displays the most serious criminal charge of participants' MHC cases (almost half of the evaluation cohort has multiple criminal cases handled in MHC), showing the most common criminal charge for the MHC cohort is Property Felonies (21.8%). Non-traffic misdemeanor offenses (which include a wide array of potential offenses such as disorderly conduct, theft, trespassing, etc.) were the second most common offense type (18.8%), followed by Drug Felonies and Person Felonies. The wide array of criminal

charges facing MHC participants stands in contrast to Hennepin County's Drug and DWI courts, which have specific offense criteria tied to program eligibility. There are no statistically significant differences between graduates and non-completers with respect to their highest criminal charge at program entry, suggesting that the type of instant offense has little impact on program outcome.

Table 10: Highest Criminal Charge of Mental Health Court Cases

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Felony Domestic	3 (50.0%)	3 (50.0%)	6 (1.8%)
Person Felony	24 (57.1%)	18 (42.9%)	42 (12.7%)
Drug Felony	21 (48.8%)	22 (51.2%)	43 (13.0%)
Felony DWI	0 (0.0%)	1 (100.0%)	1 (0.3%)
Property Felony	39 (54.2%)	33 (45.80%)	72 (21.8%)
Other Felony	0 (0.0%)	1 (100.0%)	1 (0.3%)
Gross Misdemeanor Domestic	3 (60.0%)	2 (40.0%)	5 (1.5%)
Gross Misdemeanor DWI	8 (44.4%)	10 (55.6%)	18 (5.5%)
Other GM	24 (63.2%)	14 (36.8%)	38 (11.5%)
Misdemeanor Domestic	10 (45.5%)	12 (54.5%)	22 (6.7%)
Misdemeanor Assault	10 (52.60%)	9 (47.4%)	19 (5.8%)
Non-Traffic	39 (62.9%)	23 (37.1%)	62 (18.8%)
Traffic	1 (100.0%)	0 (0.0%)	1 (0.3%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

The final descriptive statistic of the evaluation cohort in this section is criminal history, seen in Table 11 below. We define criminal history as the total of non-payable offenses for which a participant pled guilty or received a conviction before beginning MHC (not including the instant offense(s) that made them eligible for MHC).

Table 11 looks at prior convictions in several ways. The first four sections contain descriptive statistics for prior non-felony non-person convictions (e.g. misdemeanor DWI, trespassing, disorderly conduct, etc.), non-felony person convictions (e.g. misdemeanor assault), felony non-person convictions (e.g. a felony drug offense), and felony person convictions (e.g. a felony domestic assault). Across all of these offense types, there are statistically significant differences between non-

completers and graduates, whereby graduates always enter the program with fewer prior convictions than do non-completers.

Table 11: Criminal History Metrics of Mental Health Court Evaluation Cohort

	*Prior Non-Felony Non-person Convictions**			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	7.42	0	74	9.43
Graduates (N=148)	2.91	0	23	4.44
Full MHC Cohort (N=330)	5.40	0	74	7.92
	*Prior Non-Felony Person Convictions**			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	0.77	0	8	1.34
Graduates (N=148)	0.28	0	5	0.69
Full MHC Cohort (N=330)	0.55	0	8	1.12
	*Prior Felony Non-person Convictions**			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	1.17	0	12	2.09
Graduates (N=148)	0.43	0	9	1.09
Full MHC Cohort (N=330)	0.84	0	12	1.75
	*Prior Felony Person Convictions***			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	0.43	0	5	0.93
Graduates (N=148)	0.17	0	3	0.51
Full MHC Cohort (N=330)	0.32	0	5	0.78
	*All Prior Convictions**			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	9.80	0	89	11.52
Graduates (N=148)	3.78	0	28	5.29
Full MHC Cohort (N=330)	7.10	0	89	9.72
	*Criminal History Points**			
	Mean	Minimum	Maximum	Std. Dev.
Non-Completers (N=182)	14.21	0	112	16.51
Graduates (N=148)	5.41	0	37	7.81
Full MHC Cohort (N=330)	10.26	0	112	14.01

* Difference between non-completers and graduates statistically significant at the $p < .001$ level
** Difference between non-completers and graduates statistically significant at the $p < .01$ level

The penultimate section of Table 11 examines the total number of pre-MHC convictions, regardless of the offense type. Once again, there is a statistically significant difference between non-completers and graduates, whereby the non-completer group averages far more prior convictions than the graduate group (9.80 compared to 3.78, respectively).

The final section displays descriptive statistics for a point system we term "Criminal History Points." The measure gives four points for each "person felony" conviction, three points for each "non-person felony" conviction, two points for each "non-felony person" conviction, and one point for each "non-felony non-person" conviction, multiplied the number of convictions at each offense level. Thus, if an individual had one prior felony person conviction and two non-felony person convictions, that individual's criminal history point total would be eight. In this way, this point scheme considers both the number and severity of a participant's prior convictions. Given that non-completers averaged significantly more convictions across all the offense types that make up the criminal history point scoring scheme, it is hardly surprising that there is a statistically significant difference in criminal history points, whereby non-completers average a higher number than graduates (14.21 compared to 5.41, respectively). Thus, the data clearly show that non-completers enter the program with longer, and more severe, criminal histories than program graduates.

The array of statistically significant differences in many of the tables above strongly suggests program graduates and non-completers look quite different at program entry. Graduates are more likely to be White, have more stable employment, more stable housing, higher educational attainment, and less extensive criminal histories. That said, the tables above only represent bivariate relationships between graduates and non-completers, and do not account for the complex interdependencies between these variables (which we consider in Table 42 below). With this examination of the evaluation cohort complete, we turn toward examining numerous aspects of what happens once individuals begin the MHC program.

Program Participation Metrics

As mentioned above, MHC is a rigorous program requiring a long-term commitment from participants. This section examines outcomes related to program participation.

Table 12 below contains descriptive statistics of review hearings and length of time in MHC. Overall, the evaluation cohort as a whole averaged 13.1 months of active participation in the

program. The shortest tenure was under a month, while the longest tenure was just over 43 months (both belonging to non-completers). There was a statistically significant difference in the average number of months active in MHC between graduates and non-completers, whereby graduates spent, on average, about 6 months longer in the program than non-completers (16.3 months comparted to 10.5 months).

Table 12: Descriptive Statistics of Review Hearings and Time in Program

	Did not Complete	Graduated	Overall
Average Months in Program*	10.5	16.3	13.1
Minimum/Maximum	Min: .5, Max: 43.2	Min: 4.6, Max: 33.8	Min: .5, Max: 43.2
Average Review Hearings*	9.7	12.9	11.1
Minimum/Maximum	Min: 1, Max: 37	Min: 3, Max: 33	Min: 1, Max: 37
	N= 182	N=148	N=330

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

Table 12 also shows individuals in the sample cohort averaged 11.1 review hearings during their MHC tenure. The minimum number of review hearings was one, while the highest number was 37 (both belonging to non-completers). Given that graduates spent longer participating in MHC on average, it is not surprising that graduates also averaged more review hearings than non-completers: 12.9 to 9.7, a statistically significant difference.

Program Outcomes by Court Type

While Hennepin County MHC is a single entity, the program has separate tracks based upon the charging level of a participant's criminal offense. The felony track is for individuals facing felony level offenses, while the misdemeanor/gross misdemeanor (misdemeanor/gross misdemeanor hereafter) track is for individuals facing non-felony charges.

Table 13 below shows that the sample contains a near equal split between individuals on the misdemeanor/gross misdemeanor track (51.8%) and the felony track (48.2%). Individuals on the misdemeanor/gross misdemeanor track have a lower graduation rate than individuals on the felony track (41.5% compared to 48.4%), but the difference is not statistically significant.

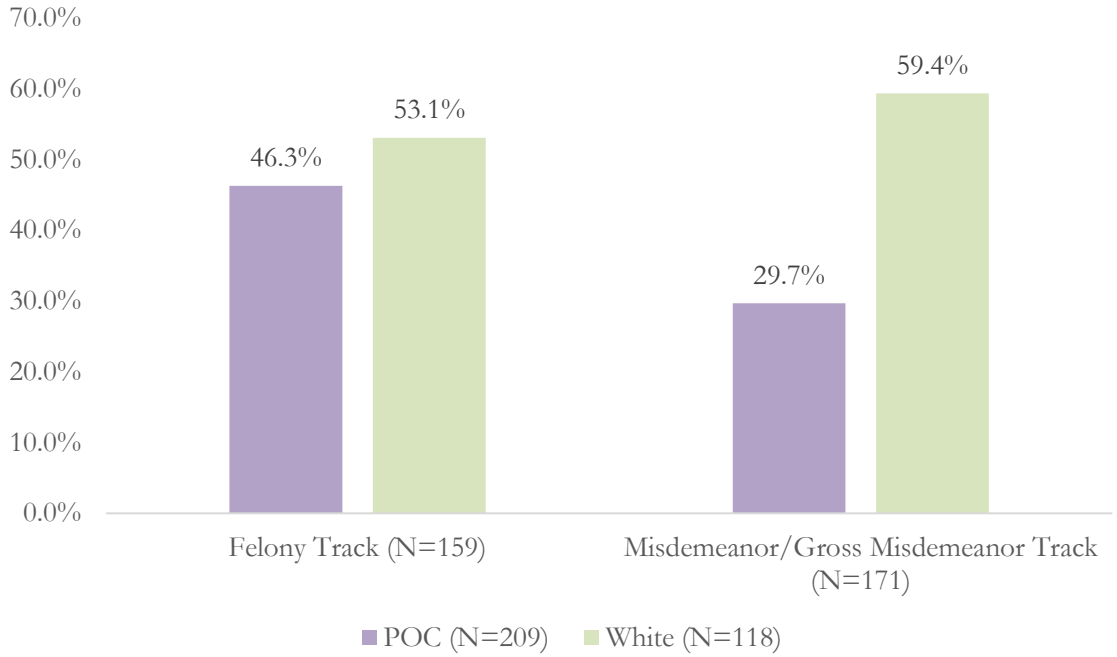
Table 13: Graduation Rates of Mental Health Court Tracks

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
Misdemeanor/Gross Misdemeanor	100 (58.5%)	71 (41.5%)	171 (51.8%)
Felony Track	82 (51.6%)	77 (48.4%)	159 (48.2%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

Table 3 above found a statistically significant difference in graduation rates between White participants and POC for the study cohort as a whole. Figure 1 below demonstrates that the racial graduation disparities exist in the misdemeanor/gross misdemeanor track.

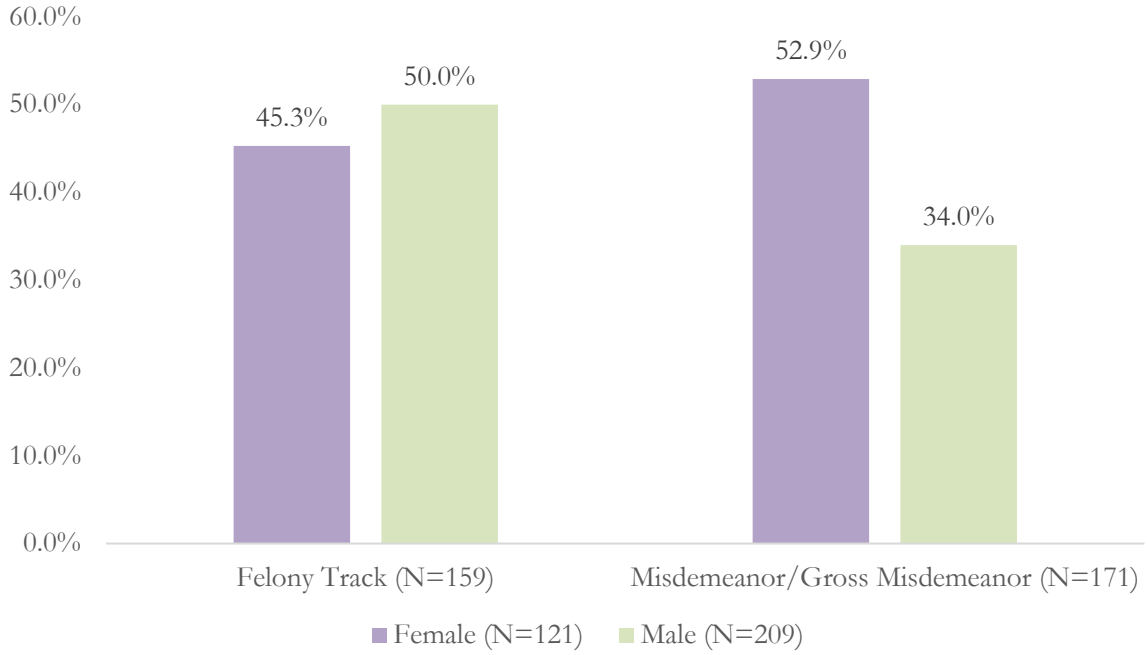
For the felony track, White individuals have a slightly higher graduation rate than POC (53.1% to 46.3%), but the difference is not statistically significant, suggesting that Whites and People of Color graduate this track at equal rates. For the misdemeanor/gross misdemeanor track, there is a stark, statistically significant ($p<.001$) difference in graduation rates between Whites and POC: six-in-ten White participants graduate (59.4%) while less than three-in-ten POC on the misdemeanor/gross misdemeanor track graduate (29.7%).

Figure 1: Graduate Rates of White and Persons of Color, by Court Type.



Although the data in Table 1 did not show a statistically significant difference in the graduation rates between males and females, looking at the gender graduation rate between the court tracks in Figure 2 reveals a more nuanced picture. Specifically, while there is no statistically significant difference in the graduation rates of males and females in the felony track, the data show that females graduate the misdemeanor/gross misdemeanor track at a higher rate than males (52.9% to 34.0%, respectively), a difference that is statistically significant ($p<.05$).

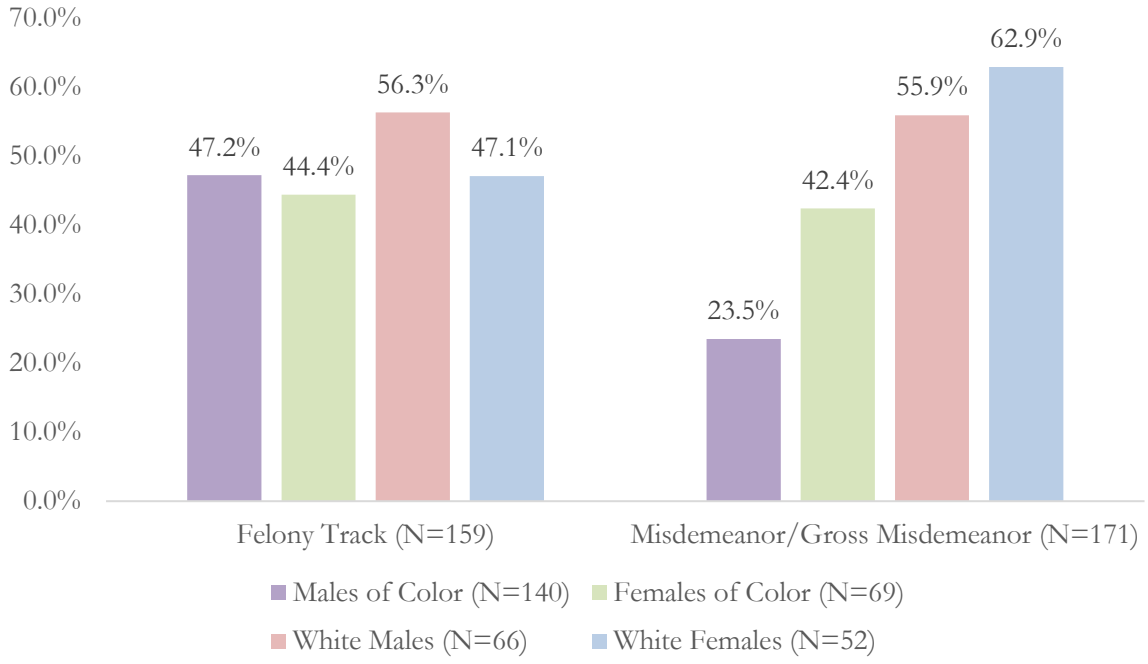
Figure 2: Graduate Rates of Males and Females, by Court Type.



The two prior figures demonstrated statistically significant differences by race and gender when looking at MHC's program tracks individually. Figure 3 below takes this analysis a step farther and looks at the graduation rate of the two tracks while examining different race and gender combinations. For the felony track, Figure 3 shows that while White Males have the highest graduation rate compared to the other race-gender combinations, the differences are not statistically significant, meaning that Males of Color, Females of Color, White Males, and White Females all graduate the track in statistically equivalent proportions. In contrast, there are large, statistically significant ($p<.001$) disparities between the graduation rates of the race-gender combinations for the misdemeanor/gross misdemeanor track. Specifically, Males of Color and Females of Color (23.5%

and 42.4%, respectively) have much lower graduation rates than White Males and White Females (55.9% and 62.9%, respectively). Phrased another way, while less than one-in-four Males of Color graduate the misdemeanor/gross misdemeanor track, almost two-thirds of White Females graduate this track. Although the size of the misdemeanor/gross misdemeanor track has shrunk in recent years, the Hennepin County Mental Health Court could attempt to identify the factors that led to this clear racial gap in graduation rates to ensure all individuals have an equal opportunity to graduate from the program, regardless of race.

Figure 3: Graduate Rates of Race-Gender Combinations, by Court Type.



With the overview of the MHC cohort and program metrics complete, we turn our attention to analyzing the degree to which the program is meeting its stated goals.

Goal 1: Reduce Criminal Recidivism

The first goal of MHC this study evaluates is whether participants reduce their contact with the criminal justice system after they leave the program. Evaluating this goal focuses on the "treatment effect" of MHC in comparison to the "business as usual" approach of the traditional criminal court process. As a result, we must contrast the experiences of individual who participated in MHC with a similar group of individuals who did not participate in MHC. Indeed, NADCP's best practice standards for treatment courts stipulate, "outcomes for [treatment court] participants are compared to those of an unbiased and equivalent comparison group."[12] In order to adhere to this standard, we create a comparison group of individuals who look similar to MHC participants, but who did not receive a referral to any treatment court in the state of Minnesota.

The aforementioned MHC eligibility and disqualification criteria provide an important starting point for creating an "unbiased and equivalent comparison group." Most importantly, the comparison group must include individuals with SPMI (serious and persistent mental illness). The Court does not collect information on mental health history or mental health diagnoses, principally because this is protected information. As a result, we must rely on a proxy to determine whether individuals who do not participate in MHC have a SPMI diagnosis. Before the Court sentences criminal offenders, DOCCR agents conduct a presentence investigation report. Part of the investigation looks at an individual's historical and/or current struggles with mental illness. When mental illness appears to be a salient issue, agents can recommend an individual undergo a mental health evaluation. Ultimately, judges can codify the recommendation for a mental health evaluation as a requirement of an offender's sentence. The Hennepin County District Court Research Division used this sentence component as the starting point for building an unbiased and equivalent comparison group of Hennepin County Criminal Court offenders who did not participate in MHC.

Admittedly, just because a judge requires an individual to undergo a mental health evaluation does not mean that an individual will receive a mental health diagnosis, much less have a SPMI. However, this method represents the closest systematic way of identifying individuals with a potential SPMI in using data available to the Court.

[12] NADCP, 2015: 60

In order to ensure that the timeframe criteria of the MHC evaluation cohort matches the comparison group, potential members of the comparison group must have had a criminal disposition date between January 1, 2014 and December 31, 2017. This matches the timeframe of the MHC evaluation cohort, who began MHC between January 1, 2014 and December 31, 2016, and who exited the program before December 31, 2017.

In addition to the requirements of a judicial order to undergo a mental health evaluation and the timeframe parameters, there were several additional eligibility criteria for the comparison group. First, the individual must have committed an offense (which we term the instant offense) in Hennepin County. Second, the instant offense could not be among the offenses discussed above that disqualify individuals for MHC eligibility. Finally, the offender must have been eighteen years old at the time they committed the instant offense.

The Hennepin County District Court Research Division found 1,361 individuals who met these criteria. This pool of potential comparison group members yielded about a four-to-one ratio with the 330 individuals in the MHC evaluation cohort, sufficient for one-to-one matching using the propensity score matching technique. In order to match this pool of potential comparison group members to the MHC evaluation cohort, we matched the two groups on the following variables:

- Race (POC or White)
- Gender (Male or Female)
- Age
- Criminal History (Number of criminal history points)
- Type of Instant Offense (Person felony offense, non-person felony offense, non-felony person offense, non-felony non-person offense)

The propensity score matching technique found a match for 273 individuals in the MHC evaluation cohort (82% of the evaluation sample), for a total 546 individuals.[13] Table 14 shows comparisons between the MHC cohort and the comparison group before and after matching. The columns

[13] The Propensity Score Matching technique uses a feature called a caliper to match individuals in treatment and control groups within a certain range of one another's propensity scores. A higher caliper yields more matches between groups, but can decrease similarity. A lower caliper increases likeness between the two groups but often results in fewer matches (Lunt 2014). We chose a caliper of .5 to maximize match quantity and similarity between the two groups.

named "MHC Cohort Average" and "Comp. Group Average" represent the proportion of each group before and after matching. Before matching, there were statistically significant differences between the MHC evaluation cohort and the comparison group pool on several of the matching variables (denoted in bold). Specifically, before matching, the two groups were statistically different on the proportion of males, age, the proportion of individuals with a person felony instant offense, a non-felony person instant offense, and a non-felony non-person instant offense. After matching, the groups are statistically identical on these indicators, suggesting the two groups are a good match.

Another important consideration of the 273 matched individuals from the MHC group is that the graduation rate of this group is almost identical to the graduation rate of the overall evaluation cohort: 44.7% for the matched group and 44.8% for the full MHC evaluation cohort. Given the vastly divergent recidivism outcomes within the MHC group depending upon whether individuals graduated or not (see Figure 6), the similarity in the graduation rate between the matched MHC group and the overall MHC evaluation cohort provides an added layer of certainty to this analysis.

Table 14: Differences on matched variables before and after propensity score matching

Variable	Match Status	MHC Cohort Average	Comp. Group Average	Significance
POC	Unmatched	0.639	0.628	0.699
	Matched	0.643	0.638	0.903
Male	**Unmatched**	**0.630**	**0.798**	**0.000**
	Matched	0.680	0.679	0.977
Age (in years)	**Unmatched**	**36.23**	**31.42**	**0.000**
	Matched	34.40	34.54	0.892
Criminal history Points	Unmatched	9.636	9.636	0.840
	Matched	8.765	9.306	0.612
Person felony offense	**Unmatched**	**0.146**	**0.498**	**0.000**
	Matched	0.169	0.188	0.562
Non-person felony offense	Unmatched	0.364	0.359	0.873
	Matched	0.423	0.395	0.508
Non-felony person offense	**Unmatched**	**0.165**	**0.086**	**0.000**
	Matched	0.191	0.177	0.673
Non-felony non-person offense	**Unmatched**	**0.326**	**0.057**	**0.000**
	Matched	0.217	0.240	0.525

Before conducting the recidivism analysis using our matched sample, we cover several important definitions and caveats. First, it is possible that certain attributes not included in the array of matched variables could affect subsequent criminal activity between the MHC cohort and the comparison group in unobserved ways. Specifically, we do not have mental health diagnosis information or life quality measures for the comparison group, and it is possible the MHC cohort and comparison differ on these attributes in a systematic manner. Although these unobserved differences could account for potential divergent outcomes between the MHC cohort and the comparison group, the legal and extralegal variables used to match these two groups provide a solid basis for assuming these two groups recidivism are "equivalent and unbiased."

This study examines new criminal activity during a two-year recidivism window. The two-year window for the MHC cohort begins on the day the individual leaves the program (either successfully or unsuccessfully). While some treatment court evaluations include the time a participant spends in the program as part of the recidivism window,[14] this study does not for two reasons. First, as noted above, the Hennepin County MHC program has mechanisms and procedures to handle new criminal offenses in the court that may result in dropped or reduced charges. Second, there is a major incongruence between the high levels of supervision participants receive while in the program and the absence of this supervision afterwards, and it is most valuable to understand how participants function once they leave the friendly confines of MHC. As a result, it is ideal to use the end date of each participant's tenure in MHC as the beginning of the 730-day recidivism window. For the comparison group, the two-year follow-up period begins on the disposition date of their instant offense. Because new criminal activity or probation violations on existing offenses can lead to jail time where individuals are physically incapable of recidivating, the one-year window takes into account the number of days an individual spends in jail/prison during this time, such that all participants have a full 730 days of non-incarcerated "street time" in which to recidivate.

NADCP's best practice standards for treatment court evaluations suggest a three-year recidivism window. However, we faced a tradeoff between maximizing the number individuals in the evaluation cohort and having a longer recidivism window. Ultimately, we chose to maximize the number of

[14] e.g. Hartley and Baldwin 2016

individuals in the evaluation sample by extending the eligibility end date, which meant shrinking the length of the recidivism window.

Finally, the term recidivism can take on different meanings and measures, some of which are not appropriate for this study. For example, some treatment court evaluations define recidivism as new arrests.[15] Comparing arrests can be misleading because of inconsistent policies across different cities.[16] In addition studies show higher arrest rates for individuals from communities of color even when self-reported offending is similar to, or less than, that of White offenders.[17] As a result, using new arrests as a measure for recidivism is not an ideal choice.

Another possible definition of recidivism is a new criminal charge. Yet, similar to arrests, criminal charges tend not to be distributed in an equitable manner since they largely rely on arrests. Johnson, for example, found that African Americans were much more likely than were Whites to have their charges dismissed in Hennepin County.[18] As a result, using charges as the measure of recidivism would likely disproportionately affect different groups. Moreover, equating charges with criminal activity appears to violate the spirit of "innocent until proven guilty," which serves as the foundation of the United States' criminal justice system.

Given these limitations, we use convictions to test for recidivism outcomes in the hopes that it will minimize potential sources of implicit bias and accurately reflect actual criminal activity. Specifically, an individual recidivates if they receive a new conviction for an offense that occurred during the one-year follow up window.[19]

With our definition of recidivism set, we turn to addressing the question of how to assess whether the MHC cohort had a reduction in recidivism.

[15] e.g. Hartley and Baldwin 2016
[16] There are dozens of police agencies in Hennepin County, each with different policies to adhere to and ordinances to enforce.
[17] see ACLU 2014
[18] Johnson, 2015
[19] This recidivism analysis omits petty misdemeanor and payable misdemeanor traffic offenses, such as Driving after Revocation.

Figure 4: Recidivism Rates of MHC Cohort and Matched Comparison Group

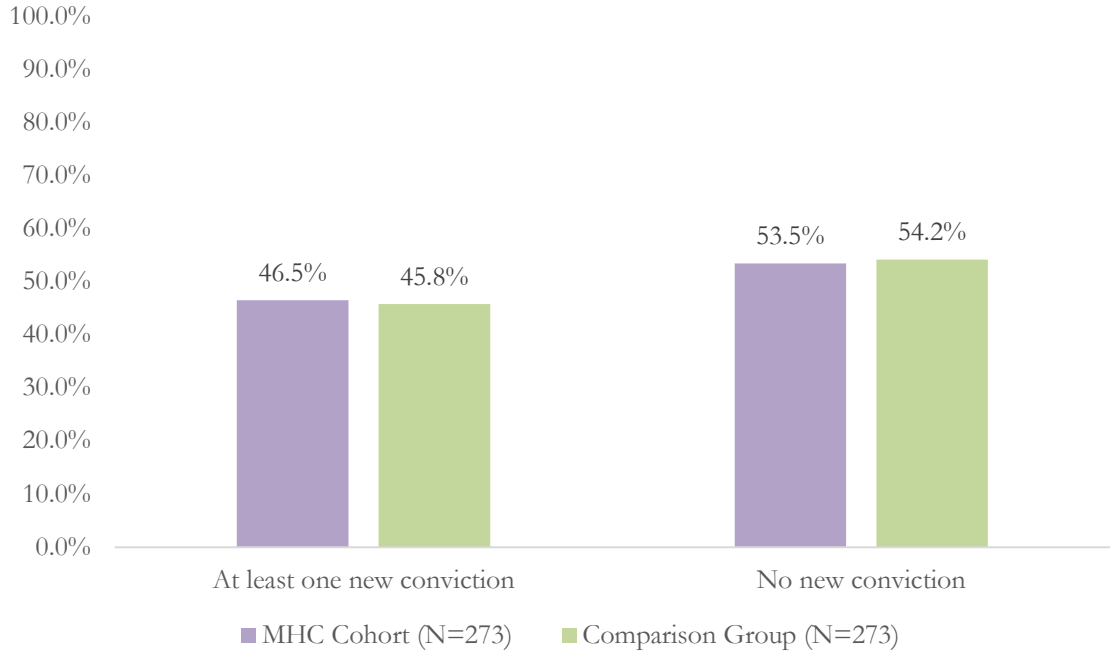
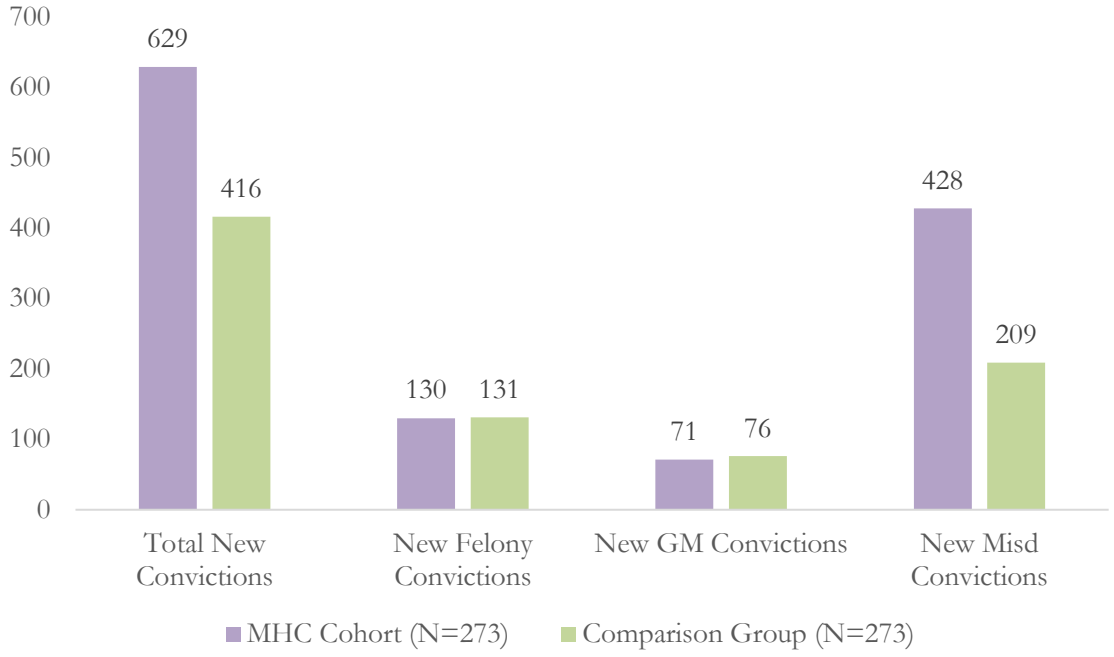


Figure 4 above shows the recidivism outcomes between the MHC cohort and the comparison group in the simplest manner, by the percentage of each group that did and did not recidivate. The data show almost equal proportions of the MHC cohort and the comparison group recidivated. For the MHC cohort, 46.5% of participants recidivated while 53.5% did not. Individuals in the comparison group recidivated at a rate of 45.8%, meaning 54.2% of the comparison group did not receive a new conviction. The difference between the two groups is not statistically significant, suggesting that equal numbers in each group recidivate. Although the majority of MHC participants did not recidivate, the fact that the recidivism rate of the MHC cohort was statistically equal to the group of similarly situated individuals who did not participate in the program suggest the program is not meeting its goal of reducing recidivism.

Figure 5: Total Recidivism Convictions of MHC Cohort and Matched Comparison Group



While Figure 4 looked at recidivism by whether individuals had any new conviction within two years, Figure 5 above looks at the total number of convictions garnered by each group during the recidivism window, broken down by charge type. Figure 5 shows individuals in the MHC cohort have more overall convictions than do individuals in the comparison group (626 to 416). Individuals in the MHC cohort have vastly more misdemeanor convictions (428 to 209), but fewer felony convictions (130 to 131) and gross misdemeanor convictions (71 to 76). Although an equal number of individuals in both groups recidivated, many recidivists from MHC cohort garnered multiple convictions during the recidivism window, especially at the misdemeanor level. The average number of convictions in the street time window was 2.30 for the MHC cohort and 1.52 for the comparison group, which is statistically significant (see Table 15 below).

Table 15: Recidivism Outcomes of MHC Cohort and Comparison Group

*Average Subsequent Misdemeanor Convictions**

	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	0.77	0	18	1.96
MHC Cohort (N=273)	1.57	0	21	3.41

Average Subsequent Gross Misdemeanor Convictions

	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	0.28	0	4	0.67
MHC Cohort (N=273)	0.26	0	14	1.03

Average Subsequent Felony Convictions

	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	0.48	0	8	1.04
MHC Cohort (N=273)	0.48	0	16	1.35

*Average Total Subsequent Convictions***

	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	1.52	0	29	2.94
MHC Cohort (N=273)	2.30	0	26	4.48

Average Subsequent Conviction (Yes or No)

	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	0.46	0	1	0.50
MHC Cohort (N=273)	0.47	0	1	0.50

Average Recidivism Points

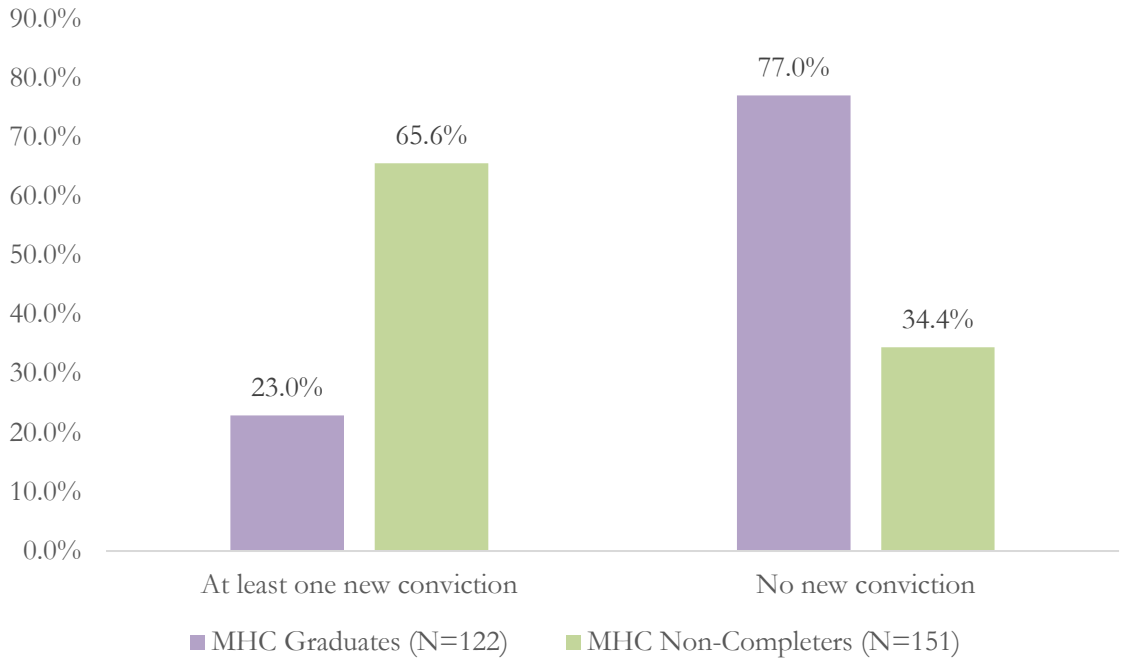
	Mean	Minimum	Maximum	Std. Dev.
Comparison Group (N=273)	2.98	0	51	5.42
MHC Cohort (N=273)	3.65	0	55	6.92

*Difference statistically significant at $p<.001$; **Difference statistically significant at $p<.05$

Table 15 contains descriptive statistics for several different ways to conceptualize recidivism, two of which were statistically significant. The MHC cohort had a significantly higher average number of new misdemeanor convictions than the comparison group (1.57 per person to 0.77 per person, respectively). In addition, the MHC cohort had a significantly higher number of average total convictions during the recidivism window than the comparison group (2.30 per person to 1.52 per person, respectively). There were no statistically significant differences between the groups in the

average number of new gross misdemeanor convictions, new felony convictions, any new conviction (yes or no), or recidivism points. While the proportion of the MHC cohort and the comparison group that recidivate is statistically equal, there are differences in the patterns in which these two groups recidivate, whereby the many individuals in the MHC cohort received multiple misdemeanor-level convictions. Overall, the data show MHC is falling short of its goal of reducing criminal recidivism.

Figure 6: Recidivism Rates of MHC Graduates and Non-Completers

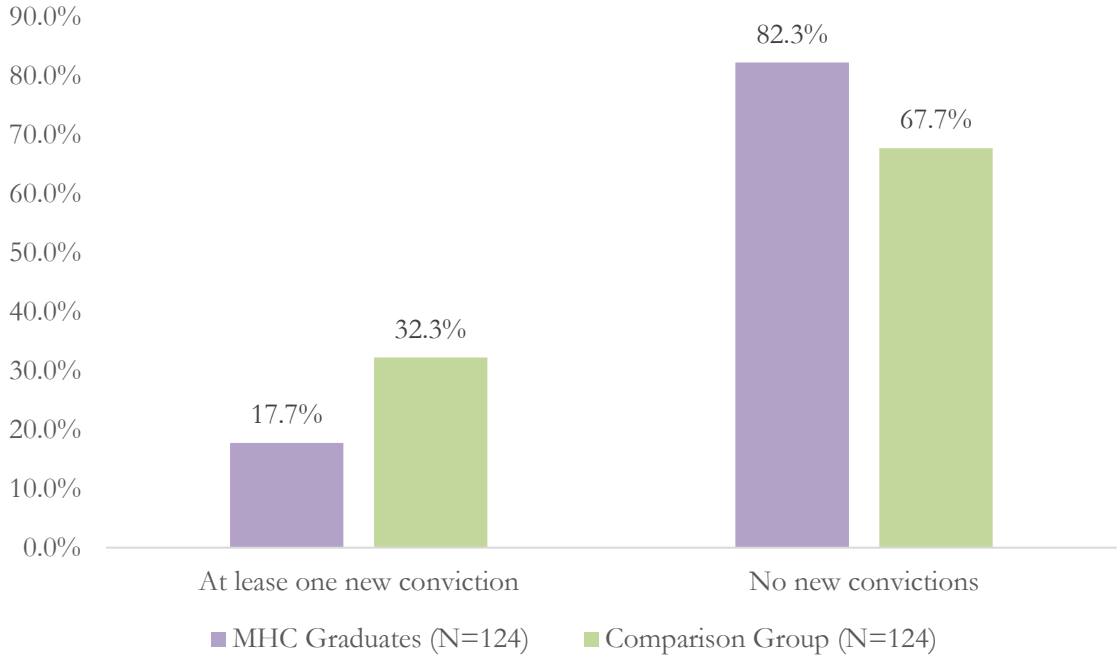


All told, 127 individuals in the MHC cohort received at least one conviction for a new offense in the two years after leaving the program. However, the recidivists in the MHC cohort were overwhelmingly individuals who did not complete the program. Specifically, of the 127 MHC participants who received a new conviction, 99 (78.0%) did not complete the program while only 28 (22.0%) graduates recidivated. Put differently, over three-in-four MHC recidivists were non-completers while less than one-in-four recidivists were graduates. Figure 6 above shows that the recidivism rate of graduates during the two years after MHC exit is 23.0% while the recidivism rate of non-completers is about 65.6%.

It is clear that MHC participants tend to have vastly different levels of contact with the criminal justice system once they leave the program depending on whether they graduated the program or not. While the better post-program recidivism outcomes of graduates relative to non-completers suggests the MHC program was effective in reducing recidivism among the individuals who succeeded in the program, Tables 1 through 11 above demonstrate graduates and non-completers were systematically dissimilar in many ways when they began MHC. As a result, we cannot say the program was responsible for the better outcomes of graduates without further analysis.

Although the full MHC cohort did not recidivate at lower rates than the matched comparison group, comparing MHC graduates to similarly situated individuals who did not participate in MHC might produce different results, as suggested by prior research.[20] In order to determine whether MHC graduates recidivate less than similar individuals who did not participate in the program, this study once again employs the propensity score matching technique to pair MHC graduates with a statistically similar comparison group based on the variables described above. Through propensity score matching, we identified a group of 124 MHC graduates (84% of MHC graduates) with whom we found a match in our comparison group pool, for 248 total individuals.

Figure 7: Recidivism Rates of MHC Graduates and Matched Graduate Comparison Group



[20] Johnson 2016; Hartley and Baldwin 2016

Figure 7 above looks at the recidivism rate of the MHC graduates and the matched comparison group. Whereas just under 18% of MHC graduates in the sample recidivated during the two-year follow-up window, over 32% of the comparison group reoffended, a difference that is statistically significant ($p<.01$).

Table 16: Recidivism Outcomes of MHC Graduates and Comparison Group

	Mean	Minimum	Maximum	Std. Dev.
*Average Subsequent Misdemeanor Convictions****				
Comparison Group (N=124)	0.37	0	8	1.07
MHC Graduates (N=124)	0.16	0	2	0.43
Average Subsequent Gross Misdemeanor Convictions				
Comparison Group (N=124)	0.14	0	2	0.37
MHC Graduates (N=124)	0.07	0	2	0.28
*Average Subsequent Felony Convictions****				
Comparison Group (N=124)	0.23	0	4	0.63
MHC Graduates (N=124)	0.08	0	4	0.42
*Average Total Subsequent Convictions***				
Comparison Group (N=124)	0.74	0	8	1.49
MHC Graduates (N=124)	0.31	0	5	0.82
*Average of Any Subsequent Conviction (yes/no)***				
Comparison Group (N=124)	0.32	0	1	0.47
MHC Graduates (N=124)	0.18	0	1	0.38
*Average Recidivism Points***				
Comparison Group (N=124)	1.53	0	15	3.01
MHC Graduates (N=124)	0.56	0	13	1.84

**Difference statistically significant at $p<.01$; ***Difference statistically significant at $p<.05$

Table 16 above contains descriptive statistics for the various ways we conceptualize recidivism between the group of MHC graduates and the matched comparison group. Compared to the recidivism measures of the full MHC sample and comparison group displayed in Table 15 above, Table 16 shows both MHC graduates and the comparison group reoffended at much lower rates than the full sample of the MHC cohort and comparison group. The data also show several statistically significant differences between the MHC graduates group and the comparison group. Specifically, MHC graduates have significantly fewer misdemeanor convictions, significantly fewer felony convictions, significantly fewer total convictions, significantly fewer individuals who have at least one conviction, and significantly fewer recidivism points.

In total, the data suggest that the MHC program appears to help graduates avoid contact with the criminal justice system after they leave MHC. Indeed, the statistically significant differences in recidivism of MHC graduates and the matched comparison group suggests many MHC graduates likely would have recidivated more were it not for MHC. However, this result did not hold for the program as a whole. Since graduation appears to curtail recidivism, we take a deeper look into what makes success in MHC more likely after the analysis of MHC's seven goals (see page 70).

Goal 2: Increase Compliance with Court-Ordered Conditions

As noted above, participants agree to adhere to a series of court-ordered conditions. Goal Two examines the degree to which participants comply with the requirements for which we have data.

Remain Law Abiding

A first main condition for all MHC participants is to remain law abiding. Although multiple ways exist to measure the degree to which an individual is law abiding, the most intuitive way to assess this condition is through new criminal activity. Table 17 below displays whether participants did or did not face criminal charges for an offense police alleged they committed while active in MHC. Overall, a majority of participants (59.4%) did not garner any new criminal charges while active in MHC. While about four-in-ten participants faced new criminal charges during MHC (40.6%), non-completers faced the vast majority of new criminal charges (78.4%), a difference that was statistically significant. Looking at the data differently, about 58% of non-completers faced new criminal charges during their MHC tenure, while less than 20% of graduates did so.

Table 17: Criminal Charges Alleged to have Occurred during MHC Participation*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
No new criminal charges	77 (34.3%)	119 (65.7%)	196 (59.4%)
At least one new criminal charge	105 (78.4%)	29 (21.6%)	134 (40.6%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

Just as the proportion of new charges garnered during MHC by non-completers and graduates differs, so too does the highest charge degree of the new criminal charges. Table 18 looks at the charge degree of the 134 criminal charges garnered during MHC by individuals in the evaluation cohort, and shows statistically significant differences between non-completers and graduates. Specifically, while new felony charges constitute about 29% of all new criminal charges, almost 95% of these charges belong to non-completers. Non-completers also had significantly higher proportions of gross misdemeanor and misdemeanor charges compared to graduates. Thus, not only did non-completers garner more new criminal charges than graduates during MHC participation, non-completers tended to face charges at more serious levels than did graduates.

Table 18: Highest Charge Degree of New Criminal Charges during MHC (N=134)**

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Felony	37 (94.9%)	2 (5.1%)	39 (29.1%)
Gross Misdemeanor	26 (81.3%)	6 (18.7%)	32 (23.9%)
Misdemeanor	42 (66.7%)	21 (33.3%)	63 (47.0%)
Total	105 (78.4%)	29 (21.6%)	134 (100.0%)

** Difference between non-completers and graduates statistically significant at the $p < .01$ level

Of course, "innocent until proven guilty" is the basis of the United States' justice system. As a result, looking at whether new criminal charges yield convictions is a more direct way to determine if participants remain law abiding. Looking at charges versus convictions, Table 17 above notes that while over 40% of the MHC evaluation cohort faced new criminal charges, Table 19 below shows that just under 27% received a conviction from these charges (26.7%). Of the 88 participants who received a new conviction during MHC participation, non-completers represented about 80% of these individuals (79.5%).

Table 19: Convictions on Criminal Charges that Occurred during MHC Participation*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
No new conviction	112 (43.3%)	130 (53.7%)	242 (73.3%)
At least one new conviction	70 (79.5%)	18 (20.5%)	88 (26.7%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

While the vast majority of graduates neither faced new criminal charges nor garnered a new conviction, it bears mentioning that about 12% of graduates received a new conviction from a crime committed during MHC. Importantly, this new criminal activity did not automatically preclude a path to graduation for these individuals. Rather, this outcome demonstrates that the MHC program is flexible in working to resolve the legal needs of participants while simultaneously addressing their mental health and chemical dependency needs.

New criminal charges are not the only indicator of whether an individual remains law abiding. By contravening the terms of their probation, participants can garner a probation violation, which can

carry legal sanctions. Table 20 below looks at the number of probation violation warrants issued to MHC participants while active in MHC.[21] The data show that judges issued probation violation to about two-in-ten MHC participants. Once again, the proportion of individuals receiving a probation violation warrant is much larger for non-completers than for graduates (82.4% to 17.6% respectively), which is statistically significant.

Table 20: Probation Violation Warrants Issued during MHC Participation*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
No probation violation warrant	126 (48.1%)	136 (51.9%)	262 (79.4%)
At least one probation violation warrant	56 (82.4%)	12 (17.6%)	68 (20.6%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

Overall, with about a quarter of the Mental Health evaluation cohort receiving a new conviction and only about a fifth of participants receiving a new probation violation warrant, the evaluation cohort was rather successful at remaining law abiding during MHC participation.

No use of alcohol or non-prescribed drugs

Another condition of MHC is abstaining from alcohol and non-prescribed drugs, which the program verifies through drug/alcohol testing. Based upon the discretion of the MHC Team, many participants must submit to random drug testing administered by DOCCR. Procedurally, DOCCR gives MHC participants a different color code. Participants call into a DOCCR phone line each day, and if DOCCR lists their color, participants must submit a drug/alcohol test that day.

The Hennepin County District Court Research Team receives drug/alcohol testing data and results from DOCCR. Table 21 below contains data about the degree to which DOCCR screened participants for drug/alcohol use. The data show a clear majority of the MHC evaluation cohort had at least one drug/alcohol test during their tenure (70.6%). That said, almost three-in-ten participants (29.4%) never had a drug test while active in MHC. Although the data in Table 21 show a difference in graduation rates with respect to the drug/alcohol testing regimen—whereby a greater proportion

[21] The correlation between the issuance of a probation violation warrant and new criminal charges during MHC is .34, suggesting that, for the most part, judges issue probation violation warrants for reasons other than new criminal charges.

of non-completers were not required to submit at least one drug test—the difference was not statistically significant, meaning that DOCCR tested equal proportions of non-completers and graduates. Problematically, of the 97 individuals who were never required to submit a drug/test, 45 had a diagnosis of a severe or moderate Substance Use Disorder at program entry,[22] suggesting the program's drug/alcohol testing regimen missed some participants with diagnosed chemical dependency issues.

Table 21: Drug Testing During Mental Health Court Participation

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
No Alcohol/Drug Tests	56 (57.7%)	41 (42.3%)	97 (29.4%)
At Least One Alcohol/Drug Test	126 (54.1%)	107 (45.9%)	233 (70.6%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

Table 22 contains descriptive statistics about DOCCR's drug/alcohol testing regimen of MHC participants. The top half of the table shows participants averaged 11.3 drug tests during MHC. Overall, the minimum number of tests was zero while the largest number of tests was 160. Graduates had an average of 15.0 drug/alcohol tests during active participation while non-completers averaged 8.9 drug/alcohol tests. Graduates submitted more drug/alcohol tests on average than non-completers, which was statistically significant. Matching the average number of drug tests in Table 22 below with the average number of months active in MHC in Table 12 above, both graduates and non-completers average about one drug/alcohol test a month while active in the program. This frequency of testing falls short of NADCP's best practice standard of random drug testing multiple times per week.[23]

The bottom portion of Table 22 contains descriptive statistics about positive drug/alcohol tests submitted by MHC participants. Overall, participants averaged 4.6 positive drug/alcohol tests while active in MHC. The fewest number of positive tests was zero while the maximum number of positive tests was 50 (belonging to a program graduate). There is virtually no difference between graduates and non-completers in the number of average positive drug/alcohol tests submitted during MHC (4.6 and 4.5, respectively). Despite the fact that participant sobriety is a central tenet of

[22] Includes DSM-V codes of "Severe" and "Moderate." DSM-IV codes of "Dependent" and "Abusing."
[23] NADCP, 2015.

MHC, positive drug/alcohol tests do not lead to program failure automatically. To the contrary, the data suggest that the program displays a good deal of flexibility with respect to helping participants achieve sobriety throughout their participation in the program.

Table 22: Alcohol and Drug Tests

	Did not Complete	Graduated	Overall
Average Number of UAs**	8.9	15.0	11.3
Minimum/Maximum	Min: 0, Max: 160	Min: 0, Max: 101	Min: 0, Max: 160
Average Positive UAs	4.5	4.6	4.6
Minimum/Maximum	Min: 0, Max: 34	Min: 0, Max: 50	Min: 0, Max: 50
	N= 182	N=148	N=330

** Difference between non-completers and graduates statistically significant at the $p < .01$ level

Table 23 below looks at the results of the drug/alcohol tests with respect to program outcomes for individuals who had at least one drug/alcohol test (N=233). Of the individuals who had at least one drug test, almost eight-in-ten (80.3%) had at least one positive test, as the rightmost column shows. Thus, failing at least one drug test was a common occurrence for those who underwent drug/alcohol testing. The data also demonstrate a statistically significant relationship with drug/alcohol test results and program outcomes. While many graduates fail at least one drug/alcohol test, non-completers represented almost 61.5% of individuals who had at least one positive drug/alcohol test. In contrast, over three-fourths of tested individuals with no positive drug/alcohol tests graduated the program (76.1%). Thus, while a positive drug/alcohol test does not prohibit individuals from succeeding in the program, the data suggest a correlation between the results of drug/alcohol tests and program outcomes, whereby positive tests correlate with failing to graduate.

Table 23: Drug Testing During Mental Health Court Participation (N=233)*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
No Positive Tests	11 (23.9%)	35 (76.1%)	46 (19.7%)
At Least One Positive Test	115 (61.5%)	72 (38.5%)	187 (80.3%)
Total	126 (54.1%)	107 (45.9%)	233 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

Table 24 unpacks the group of MHC participants with at least one positive drug/alcohol test (N=187) with respect to the timing of these positive drug/alcohol tests relative to when participants began and ended MHC. The top half of the table looks at the average number of days between participants' MHC start date and the date of their first positive drug/test. Overall, participants with at least one positive drug/alcohol test spend, on average, about 82 days in MHC before submitting a positive drug/alcohol test. Although this average number of days is higher for graduates than non-completers (97 days compared to 72 days), the difference is not statistically significant.

Table 24: Average Days between Positive Drug Tests and MHC Start/End (N=187)

	Did not Complete	Graduated	Overall
Average days between MHC start and first positive drug test	71.8	97.2	81.6
Minimum/Maximum	Min: 0, Max: 735	Min: 0, Max: 497	Min: 0, Max: 735
Average days between last positive drug test and MHC end*	115.5	191.5	144.8
Minimum/Maximum	Min: 0, Max: 635	Min: 0, Max: 497	Min: 0, Max: 635
	N= 115	N=71	N=187

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

The bottom portion of Table 24 table looks at the average number of days between participants' final positive drug test and the date they leave MHC. Non-completers who submitted at least one positive drug/alcohol test average about 116 days between their final positive drug/alcohol test and their MHC exit date. For graduates, the number of days between the final positive drug/alcohol test and their MHC exit date is significantly longer at about 192 days. These data show, on average, that program graduates tend to have no positive drug/alcohol tests in the six months before graduation, suggesting graduates are largely complying with the no use condition as they exit the program. That said, several graduates submitted positive drug/alcohol tests in the weeks before their MHC graduation date, while one graduate tested positive on their MHC graduation date.

Overall, the data show that the while the program tests the bulk of participants at least once for drugs/alcohol, just under three-in-ten participants are never required to submit at least one drug/alcohol test. For those who are tested, the average number of tests and positive tests is similar for graduates and non-completers, but testing is quite concentrated among certain individuals in the cohort. Participants receive, on average, one drug test per month while active, which the program

might focus on increasing in order to comply with NADCP standards of randomly testing all participants multiple times per week. Among the participants who received at least one drug/alcohol test, graduates test positive at significantly lower rates than non-completers. That said, almost half (48.7%) of program graduates have at least one positive drug test during MHC participation, suggesting that positive drug/alcohol tests do not negate the possibility of program success.

Attend All Court Appearances and be on Time

Another requirement of MHC to which participants consent is to attend all court appearances and be on time. Table 25 displays the number of warrants issued by the MHC Judge for failing to appear for a review hearing during MHC, and shows that about three-in-ten MHC participants (30.3%) had at least one failure to appear (FTA) warrant issued to them during their MHC tenure. However, the proportion of graduates and non-completers with a FTA warrant issued by the MHC Judge was not equal. Indeed, of the 100 individuals receiving a FTA warrant during MHC participation, more than four-fifths (83.0%) were non-completers. By contrast, of the 230 participations without a FTA warrant issued to them by the MHC Judge, 57% were graduates.

Table 25: Failure to Appear Warrants Issued during MHC Participation*

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
No Failure to Appear Warrants	99 (43.0%)	131 (57.0%)	230 (69.7%)
At Least One Failure to Appear Warrant	83 (83.0%)	17 (17.0%)	100 (30.3%)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

On its own, Table 25 only provides a snapshot into FTA rates during participation. In order to determine whether participants failed to appear less during MHC participation, we examined whether MHC participants had any FTA warrants issued in the year before acceptance to MHC. The rightmost column of Table 26 shows that a larger proportion of MHC participants had at least one FTA warrant issued to them during the 365 days before MHC than during MHC (49.4% before compared to 30.3% during). Furthermore, there was a higher concentration of graduates in the group of individuals with at least one FTA warrant prior to entering MHC compared to the proportion of graduates with an FTA warrant during MHC participation (28.8% compared to 17.0%).

Table 26: Failure to Appear Warrants Issued during Year before MHC Participation*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
No Failure to Appear Warrants	66 (39.5%)	101 (60.5%)	167 (50.6%)
At Least One Failure to Appear Warrant	116 (71.2%)	47 (28.8%)	163 (49.4 %)
Total	182 (55.2%)	148 (44.8%)	330 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level

For both timeframes, graduates were significantly less likely to have a FTA warrant issued against them after missing a court appearance than non-completers. Furthermore, a paired t-test among graduates shows a statistically significant reduction in the proportion of these 148 individuals who have at least one FTA warrant before MHC compared to FTA warrants during MHC. The same holds true for non-completers, whereby a paired t-test showed that a statistically significant difference in the proportion of non-completers who receive an FTA warrant during MHC participation compared to the proportion of non-completers who received a FTA warrant in the year prior to MHC acceptance. Thus, although three-in-ten many receive an FTA warrant for missing a MHC review hearing, graduates and non-completers alike received significantly more FTA warrants in the year prior to entering MHC.

In total, program participants are doing a decent job of complying with court-ordered conditions when examining new criminal activity, drug/alcohol test results, and attending court appearances. That said, graduates tend to comply more with these stipulations than non-completers.

Goal 3: Improve Life Stability

In determining the degree to which MHC enhances the life stability of participants, this study contrasts entry and exit measures for housing status, employment status, and educational status. Unfortunately, we do not have quality of life metrics for the comparison group used in the recidivism analysis above, so we must compare participants to themselves at MHC entry and exit. In addition, we examine the entry-to-exit trajectory for these quality of life metrics, broken down by graduates and non-completers.

Employment Status

Table 27 displays the employment statuses of all MHC participants at entry and exit, along with the percentage change from entry to exit for each option. Whereas the vast majority of participants entered the program unemployed, the number of unemployed individuals at MHC exit dropped precipitously (-41.9%). Instead, the ranks of individuals on disability, individuals with full time employment, individuals with part time employment, and individuals who became students all grew from entry to exit. Overall, the data in Table 27 suggest participants made marked improvements with respect to their employment outcomes between entry and exit.

Table 27: Employment Status at MHC Entry and Exit

	At Program Entry # *(% of Total)*	At Program Exit # *(% of Total)*	Percent Change
Unemployed	253 (76.7%)	147 (46.7%)	-41.9%
Receiving Disability	20 (6.1%)	71 (21.5%)	255.0%
Retired	3 (0.9%)	5 (1.5%)	66.7%
Homemaker	1 (0.3%)	1 (0.3%)	0.0%
Student	0 (0.0%)	10 (3.0%)	N/A
Part time	40 (12.1%)	44 (13.3%)	10.0%
Full time	8 (2.4%)	45 (136%)	462.5%
Unknown	5 (1.5%)	7 (2.1%)	40.0%
Total	330 (100.0%)	330 (100.0%)	

While the data in Table 27 are suggestive of aggregate improvements in employment status, they represent snapshots at two points in time and cannot determine participants' employment trajectory

from MHC entry to exit on their own. Table 28 below looks specifically at the employment outcomes of participants, with breakdowns for non-completers and graduates. Importantly, Table 28 removes individuals with "unknown" employment data in order to present a clearer picture of start-to-finish employment trajectories. However, because the vast majority of missing data belongs to non-completers, we must adjust the sample to ensure that graduates are not overrepresented. That is, because graduates tend to have better outcomes, removing the non-completers with missing data while leaving all the graduates could possibly distort the employment trajectory data in a way that could make the program appear more successful than it really is. In order to rectify this problem, we randomly removed eleven graduates from this section of the analysis in order to ensure the percentages of non-completers and graduates match the proportions of non-completers and graduates in the full sample as closely as possible (55.2% and 44.8%, respectively). As a result, the number of individuals in the employment trajectory analysis is 307: 170 non-completers and 137 graduates, which preserves the non-completer/graduate proportion from the full sample.

Table 28: Employment Trajectory of Mental Health Court Cohort (N=306†)*

	Did not Complete *# (% of Total)*	Graduated *# (% of Total)*	Total *(% of Total)*
Full time employment throughout	2 (50.0%)	2 (50.0%)	4 (1.3%)
Improvement to full time	6 (15.8%)	33 (84.2%)	36 (12.4%)
Part time employment throughout	5 (50.0%)	5 (50.0%)	10 (3.3%)
Improvement to part time	7 (24.1%)	22 (75.9%)	29 (9.4%)
Became a student	1 (10.0%)	9 (90.0%)	10 (3.3%)
Retired during program	0 (0.0%)	5 (100.0%)	5 (1.6%)
On disability throughout	5 (50.0%)	5 (50.0%)	10 (3.3%)
Went on disability during program	33 (56.9%)	25 (43.1%)	58 (18.9%)
Unemployed throughout	100 (78.1%)	28 (21.9%)	128 (41.7%)
Became unemployed during program	11 (73.3%)	4 (26.7%)	12 (4.9%)
Total	170 (55.4%)	137 (44.6%)	307 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level
† Individuals randomly sampled to match overall proportion of non-completers and graduates

The data in Table 28 largely corroborate the entry and exit snapshots of Table 27 above, and suggest that many MHC participants made improvements in their employment status.[24] Although a plurality of the sample was unemployed throughout their time in MHC, many individuals made noteworthy changes in their employment statuses. Specifically, about 12% of the sample upgraded to full time employment, just under 10% upgraded to part time employment, about 19% began receiving disability benefits, while only about 5% became unemployed. These gains represent clear successes. That said, Table 28 also shows statistically significant differences between non-completers and graduates, whereby graduates enjoyed the bulk of the employment trajectory improvements. For example, graduates represented 84.2% of the individuals who upgraded to full time employment and 75.9% of the individuals who upgraded to part time employment. Importantly, however, of the individuals who went on disability during the program, the majority were non-completers (56.9%), which provide these individuals with a stable source of income.

Housing Status

The next quality of life outcome analyzed is whether participants made improvements in the stability of their housing situation. Looking at housing status from program entry to exit in Table 29 below, one of the most striking aspects was that homelessness among MHC participants more than halved. In addition, the data show over a 50% increase in individuals who lived independently from program start to finish. Table 29 also shows an increase in the number of individuals living in correctional facilities (e.g. the Hennepin Adult Detention Center or the Hennepin County Workhouse) and residential facilities at MHC exit compared to entry. In addition, there was a decrease in the number of individuals living with a relative or friend from start to finish. All told, the data in Table 29 suggest a high degree of fluidity with respect to participants' housing status during their MHC tenures.

[24] In determining whether individuals made improvements, we developed a hierarchy of employment outcomes, whereby full time employment was at the top, part time employment next, followed by a series of statuses that we consider equal (student, retiree, homemaker, and being on disability), and ending with unemployment. If an individual had part time employment and was a student or was receiving some sort of disability benefits, we coded that individual's employment status as part time.

Table 29: Housing Status at MHC Entry and Exit

	At Program Entry # *(% of Total)*	At Program Exit # *(% of Total)*	Percent Change
Homeless	87 (26.4%)	42 (12.7%)	-51.7%
Correctional Facility	9 (2.7%)	36 (10.9%)	300.0%
Residential Facility	26 (7.9%)	36 (10.9%)	38.5%
Relative/Friend	125 (37.9%)	86 (26.1%)	-31.2%
Independent	81 (24.5%)	124 (37.6%)	53.1%
Unknown	2 (0.6%)	6 (1.8%)	200.0%
Total	330 (100.0%)	330 (100.0%)	

Table 30 provides a more nuanced view by examining the trajectory of participants' housing status from start to finish.[25] Once again, we removed participants with missing data—all of which came from non-completers—and randomly dropped five graduates to maintain the proportion of non-completers and graduates from the full sample.

The data in Table 30 show a plurality of individuals upgraded their housing status to living independently at MHC exit (20.1%) while the next most common outcome was living independently from start to finish (17.6%). Taken together, these data suggest that the program is helping participants increase their housing stability. In addition, considering Table 29 above showed over a quarter of participants entered the program as homeless, it is impressive that only about 9% of participants were homeless from start to finish. However, no one who was homeless at the end of the program graduated.

[25] Once again, we created a hierarchy of housing outcomes to establish a trajectory. Living independently was at the top, followed by living with a friend or relative, living at a residential facility, with homelessness and living at a correctional facility tied at the bottom of the hierarchy.

Table 30: Housing Trajectory of Mental Health Court Cohort (N=319†)*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Lived independently throughout program	16 (28.6%)	40 (71.4%)	56 (17.6%)
Upgraded to living independently during program	20 (31.3%)	44 (68.7%)	64 (20.1%)
Downgraded from independent living to something less during program	13 (61.9%)	8 (30.8%)	21 (6.6%)
Lived with relative/friend throughout program	32 (64.0%)	18 (36.0%)	50 (15.7%)
Upgraded to living with relative/friend during program	15 (62.5%)	9 (37.5%)	24 (7.5%)
Downgraded from living with relative/friend to something less during program	28 (77.8%)	8 (22.2%)	36 (11.3%)
Lived at residential facility throughout program	4 (30.8%)	9 (69.2%)	13 (4.1%)
Upgraded to living at residential facility during program	6 (50.0%)	6 (50.0%)	12 (3.8%)
At correctional facility at start and end of program	2 (100.0%)	0 (0.0%)	2 (0.6%)
Homeless at start and end of program	27 (100.0%)	0 (0.0%)	25 (8.5%)
Correctional facility at beginning, homeless at end	3 (100.0%)	0 (0.0%)	3 (0.9%)
Homeless at beginning, correctional facility at end	9 (90.0%)	1 (10.0%)	6 (3.1%)
Total	176 (55.2%)	143 (44.8%)	319 (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level
† Individuals randomly sampled to match overall proportion of non-completers and graduates

Similar to many other outcomes in this analysis, program graduates represented the vast majority of individuals who made gains while non-completers typically represented the bulk of people who lost ground. For example, about seven-in-ten individuals who upgraded their housing status to living independently graduated MHC, while over 60% of individuals who downgraded from living with relative/friend to something less came from the non-completer group. Furthermore, for the group of individuals who downgraded from living with a relative/friend to something less stable, the most common outcome was becoming homeless. That said, non-completers made some strides with

respect to housing stability: over 60% of individuals who increased their housing status to living with a friend or relative were non-completers.

Overall, most individuals in the sample had more stable housing at exit than at entry, suggesting the program is succeeding in helping individuals get more stable housing.

Educational Status

The final quality of life measure we examine is education status. Education status is different from housing or employment in that once an individual attains a certain milestone—getting a GED or a four-year degree, for example—an individual cannot lose that designation. Thus, educational status only considers gains. That said, increases to educational status also take time; college degrees, for example, take years to complete. The relatively long-term nature of educational achievements stands in contrast to the relatively short period of time individuals participate in MHC (an average of 13 months from Table 11 above). As a result, educational status changes are likely to be less common than housing or employment status changes.

Table 31: Education Status at MHC Entry and Exit

	At Program Entry # *(% of Total)*	At Program Exit # *(% of Total)*	Percent Change
No high school diploma/GED	113 (34.2%)	84 (25.5%)	-25.7%
High school diploma/GED	107 (32.4%)	124 (37.6%)	15.9%
Some college, but didn't graduate	72 (21.8%)	73 (22.19%)	1.4%
Two-year degree	15 (4.5%)	19 (5.8%)	26.7%
Four-year degree	15 (4.5%)	21 (6.4%)	40.0%
Post graduate/professional degree	3 (0.9%)	4 (1.2%)	33.3%
Unknown	5 (1.5%)	5 (1.5%)	0.0%
Total	330(100.0%)	330 (100.0%)	

Nevertheless, Table 31 above shows that many individuals in MHD did indeed make progress with respect to educational status attainment. Specifically, from MHC start to finish there was a 16% increase in the number of individuals with a high school diploma/GED, while several individuals also completed a two- or four-year degree.

Table 32: Education Trajectory of Mental Health Court Cohort (N=321†)***

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Already obtained post graduate or professional degree	1 (33.3%)	2 (66.7%)	3 (0.9%)
Obtained post graduate or professional degree during program	0 (0.0%)	1 (100.0%)	1 (0.3%)
Already obtained 4-year degree	4 (28.6%)	10 (71.4%)	14 (4.4%)
Obtained 4-year degree during program	2 (28.6%)	5 (71.4%)	7 (2.2%)
Already obtained 2-year degree	6 (54.5%)	5 (45.5%)	11 (3.4%)
Obtained 2-year degree during program	2 (25.0%)	6 (75.0%)	8 (2.5%)
Started and ended with some college but no degree	31 (50.8%)	30 (49.2%)	61 (19.0%)
Started a college/vocational program during program	3 (33.3%)	6 (66.7%)	9 (2.8%)
Already obtained HS diploma/GED	57 (60.0%)	38 (40.0%)	95 (29.6%)
Obtained HS diploma/GED during program	12 (44.4%)	15 (55.6%)	27 (8.4%)
Started and ended program with no HS diploma/GED	59 (69.4%)	26 (30.6%)	85 (26.5%)
Total	177 (55.1%)	144 (44.9%)	321 (100.0%)

*** Difference between non-completers and graduates statistically significant at the $p < .05$ level
† Individuals randomly sampled to match overall proportion of non-completers and graduates

Looking at the trajectory of educational status, Table 32 below shows the most common educational outcome was starting and ending the program with a high school diploma/GED (29.6%). It was also common for individuals to start and end the program with no high school diploma/GED (26.5%) and to have started and ended MHC with some college, but no degree (19.0%). About 8% of participants obtained a high school/diploma during MHC participation. Between 2-3% of MHC participants obtained a four-year degree (2.2%), obtained a two-year degree (2.5%), and started a college or vocational program (2.8%). Given the length of time educational achievements take relative to the length of time individuals spend in MHC, it is not surprising that the gains to educational status were limited. That said, the data show participants are making educational gains.

Overall, MHC participants leave the program with better employment outcomes, more stable housing, and higher educational attainment. Yet the gains were concentrated among graduates.

Goal 4: Reduce hospitalizations and emergency room visits

The fourth goal of MHC is to reduce a participant's contact with the healthcare system stemming from a decompensation in mental health. In order to assess this goal, we compare the number of mental health-related hospitalizations at program entry to the number of mental health-related hospitalizations during MHC participation. In addition, we examine the number of mental health-related emergency room (ER) visits during MHC participation.[26]

During the MHC eligibility screening process, participants self-report their number of prior mental health-related hospitalizations. While individuals are active MHC participants, probation officers keep track of their clients' mental health-related hospitalizations, which probation officers report to the Fourth Judicial District Court Research Department on a quarterly basis.

Table 33 below contains the results of the number of mental health-related hospitalizations before and during MHC, broken down by non-completers and graduates. Upon entering MHC, a majority of non-completers and graduates had two or more prior mental health-related hospitalizations (54.4% and 62.2%, respectively). For non-completers, the second most common number of prior mental health-related hospitalizations was zero (29.7%), while it was one for graduates (20.3%). Overall, at program entry, graduates had a greater proportion of individuals with at least one prior mental health hospitalization compared to non-completers (82.5% to 68.1%).

Table 33: Number of Mental Health-Related Hospitalizations before and after MHC

	Before MHC		**During MHC**	
	Non-Completer *# (Column %)*	Graduate *# (Column %)*	Non-Completer *# (Column %)*	Graduate *# (Column %)*
Zero	54 (29.7%)	23 (15.5%)	145 (79.7%)	116 (78.4%)
One	25 (13.7%)	30 (20.3%)	15 (8.2%)	16 (10.8%)
Two or More	99 (54.4%)	92 (62.2%)	14 (7.7%)	16 (10.8%)
Unknown	4 (2.2%)	3 (2.0%)	8 (4.4%)	0 (0.0%)
Total	182 (100.0%)	148 (100.0%)	182 (100.0%)	148 (100.0%)

The data on the right side of Table 33 present a different picture, whereby clear majorities of non-completers and graduates did not have a mental health-related hospitalization during MHC (79.7%

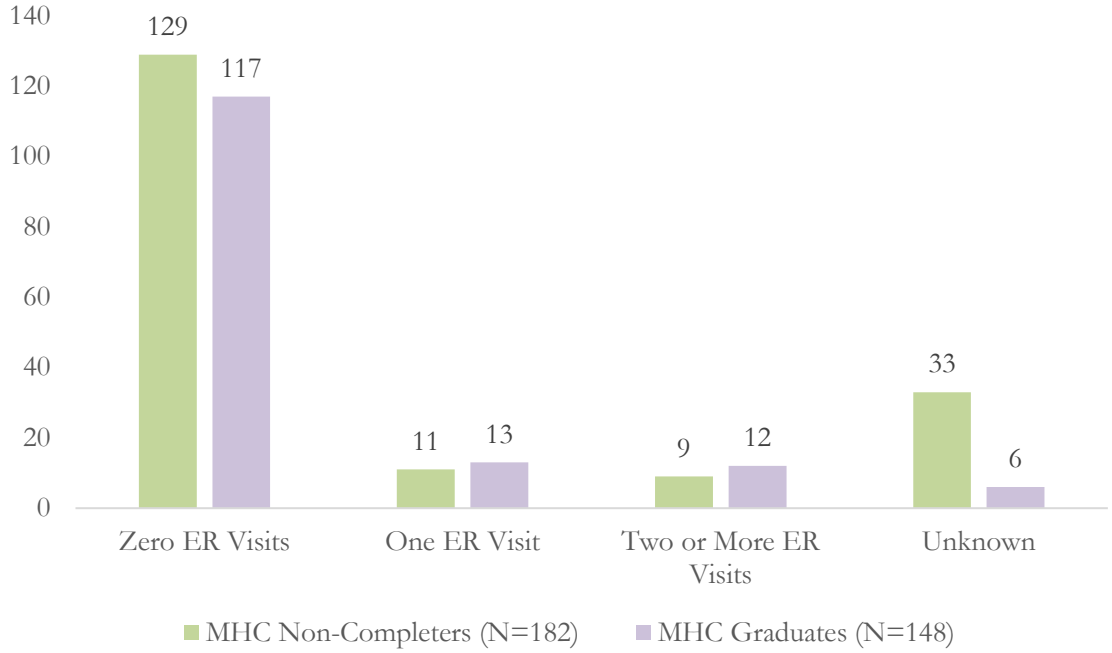
[26] Unfortunately, we did not collect data about the number of mental health-related ER visits before MHC participation.

and 78.4%, respectively). A lower proportion of non-completers had two or more mental health-related hospitalizations compared to graduates (7.7% to 10.8%). Interestingly, the data show that a greater proportion of graduates had at least one mental health-related hospitalization during MHC participation than non-completers (although data were missing from eight non-completers). Overall, these data provide some evidence showing mental health related hospitalizations are an infrequent outcome while participants are active in MHC.

The second way we measure this goal is by examining the number of ER visits during MHC participation. Unfortunately, we did not collect data about the number of mental health-related ER visits before MHC participation, so we cannot compare the number of ER visits during MHC to the number of ER visits prior to MHC.

Figure 8 below contains the number of mental health-related ER visits during MHC. Clear majorities of graduates and non-completers had zero mental health-related ER visits while active in MHC (79.1% and 70.9%, respectively). Interestingly, more graduates than non-completers had one or more ER visits, although missing data for the non-completer group was an issue for this measure.[27]

Figure 8: Mental Health Related Emergency Room Visits of Graduates and Non-Completers during MHC



[27] We did not receive emergency room visit data for 18.1% of the non-completer group.

While it appears the program is succeeding on this goal, a caveat is in order. Specifically, the pre- and post-measures of prior mental health-related hospitalizations in Table 33 capture dissimilar timeframes. At program entry, participants report the number of prior mental health-related hospitalizations in their lifetime, which we compare to the number of mental health-related hospitalizations during MHC participation. Thus, the pre-period could stretch for years or decades, while the post-measure looks at the limited duration of a participant's MHC tenure, which averages 13 months per Table 11 above. Going forward, screeners should ask about mental health-related hospitalizations and ER visits in the prior 12 months. Given this caveat and the lack of baseline data for ER visits, the most we can say with respect to this goal is that a wide majority of participants—graduates and non-completers alike—do not have contact with the healthcare establishment for mental health-related emergencies while active in MHC.

Goal 5: Reduce Jail Time

The fifth goal of MHC is to reduce the amount of time participants spend incarcerated. We assess this goal by comparing the number of days participants spent incarcerated during the 365 days before entering MHC to the number of jail days during MHC.

Table 34 shows descriptive statistics for jail days before and during MHC, with breakdowns for non-completers and graduates. For the entire sample, the average number of jail days before and during MHC is almost equal (28.3 before compared to 28.0 during). Since individuals spend, on average, as much time in jail during the program as they did before the program, the data suggest that MHC does not reduce jail time among participants.

Table 34: Descriptive Statistics of Jail Days before and during MHC, by Program Outcome

	Did not Complete	Graduated	Overall
Average Jail Days Before MHC*	37.4	17.1†	28.3
Minimum/Maximum	Min: 0, Max: 269	Min: 0, Max: 175	Min: 0, Max: 269
Average Jail Days During MHC*	42.8	9.8†	28.0
Minimum/Maximum	Min: 0, Max: 407	Min: 0, Max: 208	Min: 0, Max: 407
	N= 182	N=148	N=330

* Difference between non-completers and graduates statistically significant at the $p < .001$ level
† Difference between graduates before and during MHC statistically significant at the $p < .01$ level

Looking at the data in Table 34 in more depth, there are clear, statistically significant differences between non-completers and graduates for the number of days each group spends incarcerated. In the 365 days before MHC, non-completers spend an average of about 37 days in jail while graduates spend an average of about 17 days incarcerated. This trend holds during MHC as well, whereby non-completers average about 43 days in jail while graduates spend an average of about 10 days incarcerated.

Furthermore, the jail time trajectories starkly diverge non-completers and graduates. Although not statistically significant, the average number of jail days for non-completers actually increased by about 6 days during MHC compared to the year before participants began MHC. For graduates, the effect is the opposite. A paired t-test reveals a statistically significant reduction ($p<.01$) in the number of jail days for graduates during MHC compared to the 365 days prior to entering the program.

Overall, we cannot say the program is succeeding in its goal of reducing jail time. That said, MHC graduates successfully reduced the number of days they spent in jail during MHC compared to the year before beginning the program.

Goal 6: Facilitate Access to Services

One important aspect of Mental Health Court is to ensure participants have access to the appropriate array of mental health services and supports. Table 35 below examines the degree to which participants had or did not have access to mental health services at MHC entry. The rightmost column shows that an overwhelming majority (69.4%) of participants did not have access to mental health services when they started the program. Just under three-in-ten participants (28.2%) reported having access to mental health services when they began their MHC tenure. A greater proportion of non-completers did not have access to mental health services at MHC start (58.5%), while a greater proportion of graduates had access to mental health services at program entry (53.8%). Although there are numeric differences between graduates and non-completers in connectedness to mental health services at MHC entry, they are not statistically significant.

Table 35: Connection to Mental Health Services before Beginning MHC

	Did not Complete *# (% of Row)*	Graduated *# (% of Row)*	Total *(% of Total)*
Not Connected to MH Services	134 (58.5%)	95 (41.5%)	229 (69.4%)
Connected to MH Services	43 (46.2%)	50 (53.8%)	93 (28.2%)
Unknown	5 (62.5%)	3 (37.5%)	8 (2.4%)
Total	182 (55.2%)	148 (44.8%)	330(100.0%)

While over two-thirds of participants did not have access to mental health services when they began MHC, Table 36 below, which examines the trajectory of mental health service connectedness from MHC entry to exit, suggests the program was successful in helping connect participants to MHC services. The final column of Table 36 shows that a majority of participants (51.7%) came into the program without mental health services, but received mental health services during their participation in MHC. The next most common outcome was connection to mental health services throughout the program (24.5%). These two data points suggest that over three-in-four participants leave MHC with access to mental health services, which represents a clear success for the program.

Table 36: Connectedness to Mental Health Services Trajectory (N=261†)**

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Connected to MH services throughout program	23 (35.9%)	41 (64.1%)	64 (24.5%)
Got connected to MH services during program	59 (43.7%)	76 (56.3%)	135 (51.7%)
Not connected to MH services throughout	50 (100.0%)	0 (0.0%)	50 (19.2%)
Lost connection to MH services during program	12 (100.0%)	0 (0.0%)	12 (4.6%)
Total	144 (55.2%)	117 (44.8%)	261 (100.0%)

** Difference between non-completers and graduates statistically significant at the $p < .005$ level
† Individuals randomly sampled to match overall proportion of non-completers and graduates

Despite these overall gains in access to mental health services, graduates represented the majority of individuals who left the program with access to mental health services. Specifically, graduates represented the majority of individuals who had access to mental health services from beginning to end and who gained access to mental health services during the program. In contrast, 19.2% of participants—all non-completers—had no connection to mental health services at the start and end of MHC, while 4.6% of participants—all non-completers—lost their connection to mental health services while active in MHC.

Thus, while the vast majority of individuals left the program connected to mental health services, graduates enjoyed these gains more than non-completers. Indeed, one possibility is that connection to mental health services is a contributing factor for success in MHC.

While Tables 35 and 36 above examines connectedness to generic mental health services, the program also matches participants to specific services and formal supports in the community to meet their individual needs. Several of the primary services to which MHC connects participants are:

> *Targeted Case Management:* (from DHS) "Targeted Case Management services (AMH-TCM) as activities that are designed to help adults with serious and persistent mental illness in gaining access to needed medical, social, educational, vocational, and other necessary services as they relate to the client's mental health needs. Case management services include developing a functional assessment, and individual community support plan, referring and assisting the person to obtain needed mental health and

other services, ensuring coordination of services, and monitoring the delivery of services."[28]

Adult Rehabilitative Mental health Services (ARHMS): "Adult rehabilitative mental health services (ARMHS) are mental health services that are rehabilitative and enable the member to develop and enhance psychiatric stability, social competencies, personal and emotional adjustment, and independent living and community skills when these abilities are impaired by the symptoms of mental illness. The services also enable a member to retain stability and functioning if he or she is at risk of losing significant functionality or being admitted to a more restrictive service setting without these services. The services instruct, assist and support a member in areas such as medication education and monitoring, and basic social and living skills in mental illness symptom management, household management and employment-related or community living transitions."[29]

Assertive Community Treatment (ACT): "Assertive Community Treatment (ACT) is an intensive nonresidential treatment and rehabilitative mental health services provided according to the assertive community treatment model. Assertive community treatment provides a single, fixed point of responsibility for treatment, rehabilitation, and support needs for clients. Services are offered 24 hours per day, seven days per week, in a community-based setting."[30]

Community Support Programs (CSP): "Community Support Programs provide easy access to a wide spectrum of services, support, and resources for persons with serious and persistent mental illness (SPMI). CSPs assist people in developing the skills necessary to function as independently as possible in the community and to provide an environment that encourages the development of person–centered support systems, including mutual-help networks."[31]

Crisis Services: The program provides services and housing options to individuals experiencing acute mental health crises, including Community Outreach for Psychiatric Emergencies (COPE), Adult Psychiatric Services, and the Nancy Page residence.

Financial Assistance Application Help: MHC helps participants apply for an array of financial benefits such as SSI/SSDI through the Social Security Administration, General Assistance through the Minnesota Department of Human Services[32], and Housing Support (formerly known as Group Residential Housing) funds.

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[28] See: https://mn.gov/dhs/partners-and-providers/policies-procedures/adult-mental-health/mh-targeted-case-management/

[29] See: https://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=id_058153

[30] See: https://mn.gov/dhs/partners-and-providers/policies-procedures/adult-mental-health/assertive-community-treatment/

[31] Hennepin County, 2019: 5

[32] See: https://mn.gov/dhs/people-we-serve/seniors/economic-assistance/income/programs-and-services/ga.jsp

Table 37: Services Provided to MHC Participants*

	Did not Complete # *(% of Row)*	Graduated # *(% of Row)*	Total *(% of Total)*
Community Support Programs	58 (39.5%)	89 (60.5%)	147 (24.8%)
Financial Assistance Application Help	66 (45.8%)	78 (54.2%)	144 (24.3%)
Targeted Case Management	32 (41.6%)	45 (58.4%)	77 (13.0%)
Adult Rehabilitative Mental Health Services	15 (25.4%)	44 (74.6%)	59 (9.9%)
Assertive Community Treatment	27 (47.4%)	30 (52.6%)	57 (9.6%)
MHSURE Application Help	26 (45.6%)	31 (54.4%)	57 (9.6%)
Crisis Services	21 (40.4%)	31 (59.6%)	52 (8.8%)
Total	226 (41.3%)	348 (58.7%)	593† (100.0%)

* Difference between non-completers and graduates statistically significant at the $p < .001$ level
† Total exceeds number of participants because each individual can have multiple services

The final column of Table 37 above shows that MHC connected the evaluation cohort to a total of 593 services or programs in the community. Since the program can connect each participant to a combination of these formal services and programs, the total number of services or programs exceeds the number of participants in the evaluation cohort. Mental Health Court connected the average graduate to 2.4 services/programs and the average non-completer to 1.2 services/programs. Community Support Programs was the most popular type of service to which MHC connected participants with 147 instances, followed closely by Financial Assistance Application Help with 144. In all instances, MHC connected a greater proportion of graduates to these programs and services than non-completers, differences that are statistically significant. Overall, graduates received 58.7% of the connections to these services, while non-completers received 41.3% of the service connections. Taken together, MHC is providing a vast array of services to a wide swath of the evaluation cohort, although service connectedness is concentrated among graduates. One open question that these data cannot answer is whether graduates are systematically different than are non-completers in being more inclined to accept the services and programs MHC offers, or whether being connected to a wider array of services helps individuals succeed in the program.

In the end, assessing the degree to which MHC is succeeding on this goal is tricky. The data presented above clearly show MHC is connecting individuals to services and programs designed to address and support participants' mental health needs. However, the degree to which the program connected the evaluation cohort to these services was stacked in favor of program graduates in a

statistically significant manner. It is difficult to determine at this time whether individuals who graduated are more inclined to accept services offered by the program, or whether the services provided help pave the way for individuals to succeed in MHC.

Goal 7: Increase Participant Satisfaction with Court Process

To determine how participants felt about MHC, the Hennepin County District Court Research Team administered surveys to Mental Health Court participants between August 7, 2017 and August 30, 2017. In order to collect as many responses as possible and increase the response rate, the Hennepin County District Court Research Team decided to conduct in-person (face-to-face) surveys with Mental Health Court participants. In order to promote honest responses on the survey from Mental Health Court participants, the survey did not collect any information that would explicitly identify the respondent (e.g. name or criminal case number). In effect, the survey responses were anonymous.

During the month the Research Department conducted surveys, the Mental Health Court judge read a prepared script at the start of each Mental Health Court session, informing participants about the surveys when all participants appearing that day were present:

> "We are currently conducting a survey of Mental Health Court participants to find out how you feel about the Mental Health Court process, how things are working and what could be improved. There are members of our Research Division here today to speak with you and get your feedback. I am asking each of you to take a few minutes after your hearing to give us your opinions. Your names will not be attached to the survey and your responses will in no way impact your case now or in the future. We greatly appreciate your time and any honest feedback you have."

After participants appeared on the record, the Judge reminded them to connect with a member from the Hennepin County District Research Division to take the survey. At the beginning of the survey, Research Team members reminded participants their participation was optional, that they would remain anonymous, and that their responses would not at all affect their case outcome or standing in the program. Upon obtaining verbal consent from respondents to proceed with the survey, Research Team members read the survey questions to participants and recorded their responses via laptop (a copy of the survey is in the Appendix of this document).

All told, the Hennepin County District Court Research Division surveyed 85 Mental Health Court participants during August 2017. The total Mental Health Court census during this month was 171, for a response rate of 49.7%, or just under half.

After the Research Department administered the surveys and analyzed the data, the Research Department wrote a report containing a thorough analysis of the survey data. See Johnson, 2018 for

the full report. What follows below is an abbreviated version of the survey results focusing on participants' opinions and attitudes about the court process.

Survey Results

The Hennepin County District Court Research Department used the concept of procedural justice to develop the MHC participant surveys. Prior academic research suggests the actual outcome of a case explains about 30-40% of litigants' satisfaction with the court process, while litigants' perceptions of whether the court treated them fairly (specifically the judicial officer) explains 60-70% of the litigants' satisfaction (Tyler, 1984; 1989). In other words, perceptions of fairness are approximately twice as important as case dispositions when it comes to measuring litigant satisfaction with the court. Procedural justice is crucial to treatment courts, where the judge needs to not only develop a rapport with participants, but also be very clear in communicating with participants, especially when judicial decisions run counter to the preferences of participants. Rooting the survey in procedural justice is ideal for assessing participants' satisfaction with MHC.

MHC Judge Results

Using a 9-point scale measuring agreement/disagreement,[33] the surveys asked participants to rate their level of agreement about the Mental Health Court Judge across several different procedural justice-informed questions listed in Table 38 below.

As Table 38 indicates, the average agreement scores for the Mental Health Court Judge were quite high across all of the questions, with all but one of the statements receiving an average agreement score of at least eight out of nine. Thus, participants strongly agreed the Judge was fair, listened well, gave clear directives, and cared about each participant's success in the program. Perhaps most importantly, second the highest score for the Judge came on the question regarding overall satisfaction with the Judge (8.55 out of 9). The only statement that failed to reach eight out of nine on the agreement scale was whether the judge keeps cases moving quickly (7.81 out of 9). This is likely due to the fact that Mental Health Court calendars are often very full, causing some participants to wait up to two hours before appearing on the record.

[33] 9 = "strongly agree," 5 = "Neither agree nor disagree," 1 = "strongly disagree"

Table 38: Questions about MHC Judge on a 1-9 Scale (N=80)

	Average Score
The judge keeps cases moving quickly	7.81
The judge treats me fairly	8.39
The judge listens carefully to what I have to say	8.14
I understand what the judge asks me to do	8.63
The judge cares if I succeed in the program	8.37
Overall, I am satisfied with how I have been treated by the judge	8.55

MHC Probation Officers Results

The survey also asked respondents to share their levels of agreement with several statements about their Mental Health Court probation officer. These questions were almost identical to the questions asked about the MHC Judge above.

Table 39: Questions about MHC Probation Officers on a 1-9 Scale (N=83)

	Average Score
My probation officer treats me fairly	8.58
My probation officer listens carefully to what I have to say	8.52
I understand what my probation officer asks me to do	8.57
My probation officer cares if I succeed in the program	8.55
Overall, I am satisfied with how I have been treated by my probation officer	8.59

Overall, survey respondents strongly agreed with the statements about their probation officer, with all responses averaging at least 8-and-a-half out of nine on the nine-point agree/disagree scale, as Table 39 shows. Specifically, respondents overwhelmingly agreed that their probation officer treated them fairly (8.58 out of 9), listened to what participants had to say (8.52 out of 9), gave clear directives and expectations (8.57 out of 9), and cared if participants succeeded in the program (8.55/9 out of 9). The strongest source of participant agreement came in response to whether participants were satisfied with their probation officer (8.59 out of 9), suggesting once again that MHC participants have a good rapport with key members of the Court Team.

Functioning of Mental Health Court

The survey also asked participants to rate their agreement across several questions relating to the functioning of Mental Health Court. There were 76 respondents to these questions, the results of which are in Table 40. Although the levels of agreement with some of these questions did not rise to

the level satisfaction noted in Tables 38 and 39 above, respondents largely agreed that Mental Health Court functioned well for them. Specifically, the results suggest that participants can balance what they need to do for Mental Health Court with their day-to-day life (7.25 out of 9). Participants also expressed a high level of agreement about whether the scheduled Mental Health Court times (Tuesday and Wednesday mornings) were convenient for them (7.64 out of 9). The lowest score in this set of questions revolved around whether participants felt they received incentives when they did well in the program (6.05 out of 9).[34] Most importantly, however, the highest average score in this section came in response to whether participants would recommend Mental Health Court to friends in similar situation (8.27 out of 9), suggesting a high level of support for the program overall.

Table 40: Functionality of Mental Health Court on a 1-9 Scale (N=76)

	Average Score
I can easily balance the Mental Health Court requirements with my day-to-day life	7.25
The scheduled Mental Health Court times are convenient for me	7.64
I get rewarded with incentives when I do well in Mental Health Court	6.05
If a friend was in my situation, I would recommend Mental Health Court to them	8.27

Finally, the survey also asked participants to identify any suggestions for improvements to the MHC Program. Of the 85 participants surveyed, 34 individuals (40%) provided additional comments. The Research Team coded these responses for content similarity, seen in Table 41.

Table 41: Suggestions to Improve Mental Health Court (N=34*)

	Number	Percent
No changes needed	10	29.4
More person-specific requirements	5	14.7
MHC is a good program/good alternative to regular court	5	14.7
Be more clear/participants don't always know what's going on	5	14.7
Negative comments	4	11.8
Length of court/punctuality of start	3	8.8
Other suggestions	3	8.8
Parking issues/costs	2	5.9
Screening improvements	2	5.9

*Number column does not total 34 and percent column does not total 100 because respondents may have made comments in more than one category

[34] During the time period of these surveys, Hennepin County MHC did not have a formalized incentive structure, which the program recently implemented.

The largest percentage of respondents (29%) indicated that Mental Health Court is good as it is and does not require any changes. Five respondents (14.7%) felt that the program could tailor requirements to the specific needs of individuals in a more systematic manner, rather than blanket requirements for everyone. For example, the program could omit participants without chemical health needs from random drug screenings. The same percentage (14.7%) felt the program is a good alternative to regular court processing.

Five respondents (14.7%) also felt the program must do a better job explaining the specifics of how Mental Health Court works and ensuring participants fully comprehend the tenets of the program. Said one participant: "Right away explain what's going on. Sometimes I still feel like I don't know. Make sure people are understanding and not just saying they understand."

Several participants shared concerns with the punctuality of court start times and the length of court. Finally, three participants (8.8%) shared that they did not feel like Mental Health Court adequately understands their mental health needs or sufficiently separates mental health issues from criminal issues.

Overall, participants expressed high levels of agreement with several key aspects of the court process, suggesting that participants are satisfied with their MHC experience and that the Program is succeeding on this goal.

Predictors of Success in Mental Health Court

The data and analysis presented above strongly suggest that program graduates fare far better than non-completers. As such, uncovering the factors that make program success more or less likely could help the program generate more graduates in the future (e.g. through identifying areas where additional services could be offered or identifying red flags that might help the MHC Team spot participants at risk of not graduating before it's too late). In turn, this could make MHC more effective at reducing criminal recidivism since graduates have better outcomes on that metric.

Since there are two outcomes for MHC participants—graduation from the program or not completing the program—binary logistic regression is the ideal method to determine the factors that make success (defined as graduation) in MHC more likely. This outcome is termed the dependent variable.

Multivariate regression analysis allows for the inclusion of multiple explanatory variables—termed independent variables—used to explain the outcome in question. This method of analysis allows researchers to isolate the unique impact of each independent variable on the dependent variable, thereby helping to reveal the factors that make the outcome more likely, less likely, or neither more or less likely.

The independent variables in this analysis consist of numerous factors that likely affect the odds of graduation. First, we include three demographic variables that should not affect the odds of graduation, but tend to impact criminal justice outcomes: race (POC compared to White individuals), gender (males compared to females), and age at MHC start.

We also include several variables based upon a participant's status at program entry. First, since Table 13 above found that differences in graduation rates between the felony MHC track and the misdemeanor/gross misdemeanor MHC track, we include a variable for whether individuals were on the felony MHC track. Additionally, we include a variable for the number of open criminal cases in Hennepin County for each individual, with the assumption that individuals with more open cases might have legal needs that are more difficult to resolve. We also include a variable for the number of criminal history points to determine whether prior offending influences MHC success. We include a variable for whether an individual had a connection to mental health services at program entry, with the assumption that individuals already connected to mental health services might be at

an advantage. Finally, we include several variables to document the mental health and chemical dependency diagnoses of individuals at program entry, which could help uncover whether certain diagnoses increased or decreased the odds of graduation. Specifically, we include variables for the qualifying mental health diagnoses for MHC: Bipolar Disorder, Borderline Personality Disorder, Intellectual Development Disorder, Major Depressive Disorder, Schizoaffective Disorder, Schizophrenia, and Traumatic Brain Injury.

The final group of variables reflects different in-program outcomes or occurrences that potentially affect the odds of graduation. First, we include variables for several mental health-related services to which the program connects participants. Specifically, we include unique variables for Targeted Case Management, Adult Rehabilitative Mental Health Services, Assertive Community Treatment, Community Support Program, and Crisis Services, all of which we described above. To examine the degree to which quality of life measures affect program outcomes, we include a variable measuring whether someone increased their housing stability during MHC and whether individuals were unemployed throughout MHC or became unemployed during MHC.[35] Finally, we include three variables examining the impact of v court rules: whether a participant tested positive on a DOCCR administered drug/alcohol test during active participation, whether an individual garnered a new criminal charge during MHC, and whether an individual failed to appear for a MHC review hearing.

Table 42 displays the results of the regression model, and several variables rise to statistical significance. The first variable that rose to statistical significance was the program track, whereby the odds of graduation are about 2.5 times higher for individuals on the felony track compared to individuals on the misdemeanor/gross misdemeanor track. The second statistically significant variable was criminal history points. The data show that each additional criminal history point reduces the odds of graduation by about 7%. Since Table 10 above showed that non-completers enter the program with longer criminal histories than graduates do, the program could offer additional levels of supervision and support for individuals who enter the program with a higher number of criminal convictions. In

Only one of the mental health diagnosis variables was statistically significant. Individuals diagnosed with Bipolar disorder at program entry have greater odds of graduation than individuals who do not

[35] We chose not to include a variable for educational status as relatively few individuals changed their education status from start to finish.

present with this diagnosis. The program could potentially provide these individuals with slightly less supervision.

Table 42: Determinants of MHC Graduation

Variable	Odds Ratio	Std. Error	Significance
Race: Reference Category White			
People of color	0.985	0.016	0.343
Gender: Reference Category Female			
Male	1.111	0.377	0.780
Age (No Reference Category)			
Age	1.020	0.015	0.197
Program Track: Reference Category Misd/GM Track			
Felony MHC Track	**2.504**	**0.352**	**0.009**
Number of MHC Cases (No Reference Category)			
Number of MHC cases	0.904	0.097	0.296
Criminal History Points (No Reference Category)			
Number of criminal history points	**0.931**	**0.021**	**0.001**
MH Services at Entry: Reference Category Those without status			
Connected to MH services at MHC entry	1.107	0.397	0.797
Diagnosis: Reference Category Those without each diagnosis			
Bipolar Disorder	**2.324**	**0.403**	**0.036**
Borderline Personality Disorder	0.696	0.503	0.471
Intellectual Development Disorder	0.536	0.765	0.416
Major Depressive Disorder	1.546	0.433	0.315
Schizoaffective Disorder	1.734	0.602	0.360
Schizophrenia	0.938	0.470	0.892
Traumatic Brain Injury	0.370	0.619	0.108
Services: Reference Category Participants without service			
Targeted Case Management	1.768	0.429	0.184
ARHMS	**3.633**	**0.505**	**0.011**
Assertive Community Treatment	1.202	0.490	0.707
Community Support Programs	**2.349**	**0.355**	**0.016**
Crisis Services	**3.281**	**0.493**	**0.016**
Quality of Life: Reference Category Those without status			
Increased housing stability during MHC	1.762	0.363	0.119
Unemployed from MHC start to finish	**0.185**	**0.355**	**0.000**
Rule Compliance: Reference Category Those without status			
New criminal charge during MHC	**0.466**	**0.389**	**0.049**
Failure to appear warrant issued by MHC Judge	**0.241**	**0.475**	**0.003**
Positive drug/alcohol test	**0.325**	**0.381**	**0.003**
(Constant)	0.967	0.882	0.970

N=309; Nagelkerke R Square = .597

Three mental health services to which the program connects participants were statistically significant. Individuals connected to an ARHMS provider had graduation odds over three and a half times higher than individuals not connected to this service. Similarly, individuals connected to Community Support Programs have odds of graduation over two times higher than individuals who do not received these services. Finally, individuals connected to Crisis Services had graduation odds about three times higher than individuals not connected to these services.

Many of the in-program variables reached statistical significance, suggesting that what happens to individuals during their tenure in MHC greatly affects their odds of graduation. Individuals who were unemployed from program start to finish or who became unemployed had 81% lower odds of graduation than participants whose employment status was not "unemployed" throughout MHC. Given these results, employment services might be a key service to provide to individuals who enter the program as unemployed or become unemployed during MHC.

Participants who picked up a new criminal charge during their MHC tenure had about 53% lower odds of graduation than individuals who did not garner new criminal charges during MHC. Similarly, individuals who had at least one warrant issued for failing to appear to a MHC review hearing had about 76% lower odds of graduation than did individuals who appeared for all of their MHC review hearings. Finally, individuals who fail at least one drug/alcohol test have about 68% lower odds of graduating than individuals who never test positive for a drug alcohol test. While sanctions may be a proper response to these infractions of program rules, the upshot is that new charges, failure to appear warrants, and positive drug/alcohol tests are stark warning signs that a participant might not be track towards to graduate, and the MHC Team could alter service and supervision levels for these individuals as soon as these events occur.

While this analysis pointed to several indicators that have a relationship to program success, it is also important to point out that many variables did not have a statistically significant impact on the odds of graduations. Somewhat surprisingly, gender, race, and age had no impact on the odds of graduation from MHC. Similarly, save for individuals diagnosed with Bipolar disorder, none of the other mental health diagnoses had a statistically significant relationship with MHC graduation, suggesting that how an individual presents with respect to their mental health diagnosis does not tend to impact on the odds of graduation.

To recap, being on the felony program track, a diagnosis of Bipolar disorder, connection to an AHRMS provider, connection to Community Service Programs, and connection to Crisis Services all increase the odds of graduation. In contrast, the odds of graduation decrease for individuals with longer criminal histories, those who are unemployed from program start to finish or become unemployed, participants who receive new criminal charges during their MHC tenure, individuals who have a warrant issued for failing to appear at a MHC review hearing, and participants who fail at least one drug/alcohol test.

Ideally, the MHC Team would not use these findings to determine the "right" participants for MHC (i.e. those more likely to graduate). That is, knowing what factors make graduation more or less likely should not influence admission decisions if participants present with these factors. Instead, the MHC Team could use these findings to inform them that certain individuals entering the program likely require different levels of supervision and services immediately upon acceptance to the program to succeed and that certain in-program occurrences might indicate a participant is at risk of not graduating.

Conclusion and Recommendations

This report analyzed the outcomes of 330 individuals who participated in the Hennepin County MHC between 2014 and 2017 in order to determine whether the program met its stated goals. Overall, data from this analysis suggest a mix of program successes and opportunities for improvement. Table 43 below contains the program goals and data-driven assessments of each goal.

The program was not successful in reducing recidivism in comparison to the traditional criminal court process in Hennepin County. The MHC evaluation cohort had an almost identical recidivism rate compared to a statistically identical group of Hennepin County criminal offenders with cases disposed following the "business as usual" model. In fact, individuals in the MHC cohort received significantly more overall convictions than the comparison group during the 730-day follow-up window. However, the data also demonstrated that MHC non-completers recidivate far more than graduates do. Furthermore, MHC graduates had significantly fewer new convictions than similarly situated individuals with cases disposed in Hennepin County criminal court. Thus, the data suggest a positive program effect with respect to recidivism, but only for MHC graduates.

The program had mixed success with its goal of increasing compliance with court ordered conditions. Most participants have neither new criminal charges nor new criminal convictions while active in the program. Many graduates had new criminal charges while active in the program, which suggests the program continually helps meet participants' evolving legal issues. The data suggest that participants have lower failure to appear rates during the program compared to the year prior to entering the program, but that non-completers are more likely to have at least one failure to appear warrant during MHC. Finally, the program could consider increasing its drug/alcohol to match NADCP standards. As it stands, almost 30% of participants had zero drug/alcohol tests, despite the fact that some individuals who were not required to submit drug/alcohol tests had diagnosed chemical dependency issues. While a similar proportion of non-completers and graduates received at least one drug/alcohol test, individuals who fail at least one test are less likely to graduate.

With respect to the goal of improving life stability, the program saw areas of success and areas that require improvement. On the positive side, many individuals left the program with more stable housing statuses, better employment outcomes, and higher levels of educational attainment compared to program entry. On the negative side, these gains were largely concentrated among program graduates. A positive finding was that many non-completers who entered the program as

unemployed began receiving disability benefits during MHC participation. The program could consider expanding housing and employment services for participants, especially those who present as unemployed and with unstable housing situations. Employment services appear to be especially salient given that start-to-finish unemployment hampers program success.

The fourth goal of MHC is to reduce hospitalizations and emergency room visits. The data from this analysis show that mental health-related hospitalizations and ER visits are uncommon occurrences for participants while they are active in the program. Although we did not have the exact data necessary to determine if participants reduced their mental health-related hospitalizations and ER visits, it appears the program provides a successful defense against severe mental health decompensations requiring a hospitalization or an ER visit.

Overall, the MHC cohort averaged almost exactly as many days in jail in the year before MHC compared to the number of jail days during MHC participation, suggesting no overall reduction in jail days. That said, the program succeeded in reducing jail time for graduates but not non-completers. Compared to the year prior to MHC entry, graduates had significantly fewer jail days during MHC while non-completers actually spent more days in jail during MHC.

The program did quite well pairing participants with an array of community services. The regression analysis above demonstrated that three of these services, ARHMS, CSP, and crisis services, were associated with a statistically significant increase in the odds of MHC graduation. However, once again, the program connected graduates to more programs and services than non-completers. Given the importance of the two aforementioned services and the non-completion risk factors identified in the regression analysis above, the program could prioritize connecting individuals who enter the program unemployed and/or those with longer criminal histories to ARHMS, CSP, and crisis services as quickly as possible.

The final goal of MHC—improving participant satisfaction with the court process—was a near unequivocal success. From surveys administered to active MHC participants in 2017, participants expressed high levels of satisfaction with the MHC judge and their MHC probation officer. Furthermore, according to the survey data, MHC functioned well for most participants.

Table 43: Goal Assessment Hennepin County MHC Evaluation

Goal	Assessment
Reduce criminal recidivism	MHC participants did not recidivate at lower rates than a statistically identical group of individuals who went through the traditional criminal court process in Hennepin County. However, MHC graduates had a statistically significant reduction in reoffending compared to a matched comparison group.
Increase compliance with court ordered conditions	Most participants do not garner new criminal charges or convictions while active in the program. Non-completers are more likely to have at least one failure to appear warrant and at least one probation violation warrant during the program. Individuals who fail at least one drug test are less likely to graduate from program.
Improve life stability	Overall, MHC participants exited the program with higher levels of housing stability, greater levels of employment, and many individuals increased their educational attainment. However, program graduates enjoyed the bulk of these gains.
Reduce hospitalizations and emergency room visits	Hospitalizations for mental health related reasons and emergency room visits for mental health crises are rare occurrences for MHC participants during active participation, suggesting the program is achieving this goal.
Reduce jail time	Program graduates significantly reduced jail days during MHC compared to the year before acceptance to MHC. Individuals who failed to complete the program spent, on average, more days in jail during MHC compared to the year before acceptance to MHC.
Facilitate access to services	The program is doing a good job of matching participants to community services and supports. Connection to adult rehabilitative mental health services (ARHMS), community support programs (CSP), and crisis services are beneficial to program success. The program connects graduates to more services than non-completers.
Increase participant satisfaction with court process	Participants express high levels of satisfaction with the program overall, the MHC judge, and their probation officer. Participants report that the program functions well for them and that they would recommend the program to a friend in a similar situation.

Taken as a whole, graduates of the MHC program tended to fare quite well. Many increased their housing stability, enhanced their employment status, made educational gains, received connections to many community programs to promote their mental health, and did not recidivate. We cannot say the same for individuals who did not complete the program. Although the data in Tables 1 through 11 show that graduates and non-completers presented quite differently at MHC entry—whereby graduates had, on average, less extensive criminal histories, higher levels of employment, greater housing stability, etc.—we cannot assume these initial differences between graduates and non-completers are destiny. Rather, the program could continue providing different levels of supervision and supervision from the start. Participants presenting with fewer prior convictions, a fulltime job, and an independent living situation will likely require far less program resources than someone entering the program with a longer list of prior convictions, no job, and no place to live. Furthermore, when certain red flags arise—such as a warrant for failing to appear for a review hearing, a new criminal charge, or a failed drug/alcohol test—the MHC Team might enhance the level of services and supports provided in order help the participant get back on track. The Hennepin MHC should continue working to ensure all individuals have an equal opportunity to succeed in the program.

As mentioned above, missing participant data was a limitation of this evaluation. With the Minnesota Judicial Branch rolling out a new statewide court treatment court database in the near future, the MHC Research liaison and the MHC probation officers—who are responsible for transmitting data about their clients—could work together to develop new methods of gathering and transmitting participant data on a real-time basis.

As with all program evaluations, the data presented above is retrospective in nature, focusing on participants active in MHC several years ago. In recent years, the program instituted numerous changes intended to enhance the experience of MHC participants and improve the efficacy of the program. While most of these recommendations should still help improve the program, the MHC Team must square the recommendations of this evaluation with the ever-evolving array of policies and procedures governing MHC. In order to ensure that MHC is using evidence to enhance its policies and procedures it might be helpful for the District Court Research Department to provide a more limited annual or semi-annual report containing certain outcome metrics, such as recidivism rates, graduation rates, and quality of life trajectories from entry to exit.

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Mental Health Court Survey

Mental Health Court Participant Survey – Script In order to help us understand what is going well and what can be improved in Mental Health Court, we are asking you to participate in a short survey about your experience in the program. The survey should take less than 10 minutes, and the results will be used to help make changes to the Mental Health Court program. Your responses will be kept completely anonymous and will not be linked to your case at all, so please feel free to fully share your opinions, thoughts, and ideas. Your participation is voluntary and you can choose to stop taking the survey if you choose. We thank you so much for your time and feedback!

How long have you been in Mental Health Court

- ○ Less than a month
- ○ Between 1 and 3 months
- ○ Between 4 and 6 months
- ○ Between 7 and 12 months
- ○ More than a year

What gender do you identify with?

- ○ Male
- ○ Female
- ○ Other (please specify) _____
- ○ Prefer not to disclose

What race do you identify as (select all that apply)?

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Native Hawaiian or Pacific Islander
- ☐ Multiracial
- ☐ Hispanic/Latino
- ☐ Other (please specify)

_____

- ☐ Prefer not to disclose

How old are you?

How important were the following reasons for you choosing to enter Mental Health Court:

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Not applicable
My lawyer encouraged me	○	○	○	○	○	○
My probation officer encouraged me	○	○	○	○	○	○
A judge encouraged me	○	○	○	○	○	○
My family encouraged me	○	○	○	○	○	○
Avoiding jail	○	○	○	○	○	○
Avoiding a felony or conviction	○	○	○	○	○	○
Getting sober	○	○	○	○	○	○
Getting mental health services	○	○	○	○	○	○

Is there any other reason that was important for you choosing to enter Mental Health Court?

How important are the following aspects of Mental Health Court in helping you stay sober and/or meeting your goals:

	Extremely important	Very important	Moderately important	Slightly important	Not at all important	Not applicable
Appearing in front of Judge	○	○	○	○	○	○
Hearing other people's stories in Court	○	○	○	○	○	○
Drug testing	○	○	○	○	○	○
Meetings with Probation Officer	○	○	○	○	○	○
Treatment	○	○	○	○	○	○
Threat of jail/sanctions	○	○	○	○	○	○
Incentives	○	○	○	○	○	○

Is there any other aspect of Mental Health Court that helps you stay sober and/or meet your goals?

Please tell us how much you agree or disagree with the following statements about the Mental Health Court Judge:

	1 (Strongly disagree)	2	3	4	5 (Neutral)	6	7	8	9 (Strongly agree)
The judge keeps cases moving quickly	○	○	○	○	○	○	○	○	○
The judge treats me fairly	○	○	○	○	○	○	○	○	○
The judge listens carefully to what I have to say	○	○	○	○	○	○	○	○	○
I understand what the judge asks me to do	○	○	○	○	○	○	○	○	○
The judge cares if I succeed in the program	○	○	○	○	○	○	○	○	○
Overall, I am satisfied with how I have been treated by the judge	○	○	○	○	○	○	○	○	○

Do you have any additional comments about the Judge?

Please tell us how much you agree or disagree with the following statements about your probation officer

	1 (Strongly disagree)	2	3	4	5 (Neutral)	6	7	8	9 (Strongly agree)
My probation officer treats me fairly	○	○	○	○	○	○	○	○	○
My probation officer listens carefully to what I have to say	○	○	○	○	○	○	○	○	○
I understand what my probation officer asks me to do	○	○	○	○	○	○	○	○	○
My probation officer cares if I succeed in the program	○	○	○	○	○	○	○	○	○
Overall, I am satisfied with how I have been treated by my probation officer	○	○	○	○	○	○	○	○	○

Do you have any additional comments about your probation officer?

What is your mental health-focused treatment status? (don't include things like individual therapy)

- ○ Currently in inpatient treatment
- ○ Currently in outpatient treatment
- ○ Currently in a day treatment program
- ○ I already completed a mental health-focused treatment program
- ○ I was discharged from a treatment program before completing
- ○ I have not been assigned to a mental health-focused treatment program
- ○ Not applicable

Do you agree or disagree that your most recent mental health-focused treatment program has helped you address the reasons you went to treatment for?

- ○ 1: strongly disagree
- ○ 2
- ○ 3
- ○ 4
- ○ 5: neutral
- ○ 6
- ○ 7
- ○ 8
- ○ 9: strongly disagree

What is the name of your most recent mental health-focused treatment program?

Please tell us how much you agree or disagree with the following statements about access to the court

	1 (Strongly disagree)	2	3	4	5 (Neutral)	6	7	8	9 (Strongly agree)
Finding the courthouse the first time was easy	○	○	○	○	○	○	○	○	○
I feel safe in the courthouse	○	○	○	○	○	○	○	○	○
I am usually able to get my court business done in a reasonable amount of time	○	○	○	○	○	○	○	○	○
I am treated with courtesy and respect by court employees	○	○	○	○	○	○	○	○	○
I can easily find the courtroom or office I need	○	○	○	○	○	○	○	○	○
The court's hours of operation make it easy for me to do my business	○	○	○	○	○	○	○	○	○
There are usually long lines at security/weapons screening on the main level of the building	○	○	○	○	○	○	○	○	○

Are there any other services that are not currently part of Mental Health Court that would be useful to you (select all that apply)?

- ☐ Help with transportation
- ☐ Help with housing
- ☐ Help with education
- ☐ Help finding employment
- ☐ More contact with probation officer
- ☐ More culturally specific resources
- ☐ Help with trauma or Post Traumatic Stress Disorder
- ☐ Help with medication administration
- ☐ Help getting health insurance
- ☐ Help getting disability benefits

Q25 **Any additional services that would be beneficial to you not listed above?**

Q29 **Have you received reminders to come to court either by text message or email?**

- ○ Yes
- ○ No
- ○ I opted out of court reminders

Q30 **Please explain why you opted out of the court reminder program:**

Q24 **Please tell us how much you agree or disagree with the following statements about Mental Health Court**

	1 (Strongly disagree)	2	3	4	5 (Neutral)	6	7	8	9 (Strongly agree)
It is easy to balance the requirements of Mental Health Court with my day-to-day life	○	○	○	○	○	○	○	○	○
The scheduled Mental Health Court times are convenient for me	○	○	○	○	○	○	○	○	○
I get rewarded with incentives when I do well in Mental Health Court	○	○	○	○	○	○	○	○	○
If a friend was in my situation, I would recommend Mental Health Court to them	○	○	○	○	○	○	○	○	○

Q32 **Have you worked with any of the Mental Health Court social workers (Courtney, Mohamed, or Devon) other than when you were initially screened for the court?**

○ Yes

○ No

Q33 **Using the agree/disagree scale, would the following potential incentives would be helpful:**

	1 (Strongly disagree)	2	3	4	5 (Neutral)	6	7	8	9 (Strongly agree)
Fewer court requirements (for example, less frequent review hearings)	○	○	○	○	○	○	○	○	○
$5 gift cards	○	○	○	○	○	○	○	○	○
Sobriety coins/recognition of number of sober days	○	○	○	○	○	○	○	○	○

Q34 **Please describe any ideas for additional potential incentives not listed above?**

Q27 **Please explain anything else we can do to improve Mental Health Court?**