The Impact of Mental Health Court on Recidivism and Other Key Outcomes

An Evaluation of the King County District Court Regional Mental Health Court

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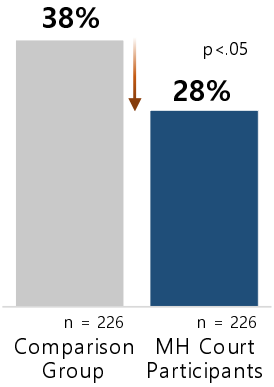
THE KING COUNTY DISTRICT COURT REGIONAL MENTAL HEALTH COURT aims to reduce recidivism and improve community safety by facilitating treatment for individuals with a mental health disorder involved in the criminal justice system. Individuals diagnosed with a mental disorder and charged with a felony or misdemeanor in King County or a municipality within King County, are eligible for consideration to the court program. A multidisciplinary team meets regularly with participants to assess needs and ensure compliance with treatment and conditions of the court. To assess the impact of the mental health court on recidivism and other key measures, we compared outcomes for mental health court participants to a statistically matched comparison group of individuals in King County with similar mental health diagnoses, criminal charges and other characteristics, who were not referred to the mental health court. Outcomes including re-arrest, new criminal charges, incarceration days, psychiatric hospitalizations, emergency department visits, crisis services, behavioral health treatment and employment were measured over a one-year follow-up period, beginning on the court start date.

Key Findings

Over a one year period, the mental health court improved outcomes on four key measures. Mental health court participants had significantly lower rates of re-offending and psychiatric hospitalization, and fewer incarceration days and emergency department visits than the matched comparison group.

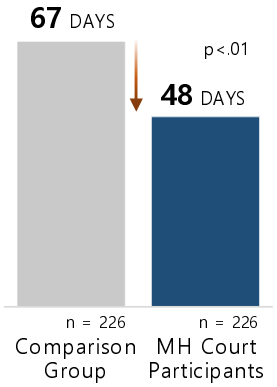
Lower Re-offense Rate

Any Criminal Charge



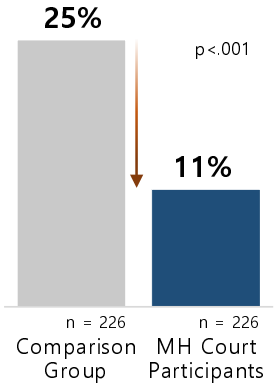
19 Fewer Days Incarceration

Local Jail or DOC Facility



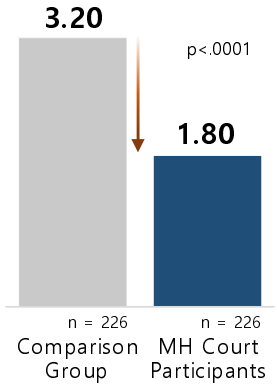
Lower Rate of Psychiatric Hospitalizations

Any Mental Health Inpatient



Fewer Outpatient Emergency Department Visits

Number of Visits per Medicaid Member Year



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King County District Court Regional Mental Health Court

The King County District Court Regional Mental Health Court began in 1999 and offers diversion from incarceration and traditional criminal court processing for individuals with a serious mental illness. The court is made up of a team of professionals with specialized training in mental health and therapeutic courts. This includes a judge, defense attorney, social workers, prosecutors, a victim advocate, peer specialists, probation mental health specialists, court clinicians and a program manager. The court team works to supervise individuals in the community while enforcing compliance with a behavioral health treatment plan.

Regional Mental Health Court Eligibility

To be eligible for participation in the court:

- Criminal charges must be prosecuted by King County or a municipality within King County,
- The defendant must have an Axis 1 disorder[1] that is ongoing and significantly impacts an individual's ability to function,
- Appropriate services must be available in the community,
- The defendant must be amenable to treatment and court supervision, and
- There must be a nexus between the defendant's mental health symptoms and the circumstances or behavior leading to current involvement in the criminal justice system.

Anyone, including law enforcement staff, defense attorneys and the prosecutor's office can refer someone charged with a state misdemeanor to the mental health court[2] and the referral can take place at any stage of the court proceedings (from pre-filing to post-sentencing). For individuals charged with a felony or who have cases pending in a municipal court in King County, the prosecutor assigned to the case must make the referral. These cases can only be referred before final disposition. Individuals who are referred to the court go through a screening process with the court to assess eligibility and mental health treatment needs.

Potential enrollees who meet eligibility criteria may choose to participate in the program ("opt-in"), where they remain under the supervision of the court for up to two years. During that time, the participant must be actively engaged in behavioral health treatment and comply with conditions of the court. Participants are required to appear before the judge regularly who may respond with either rewards and/or sanctions to help motivate engagement in treatment and encourage appropriate behavior.

Study Design

Using program data provided by the court from January 2013 to August 2017, we identified 1,006 individuals referred to the mental health court.[3] Of those, 420 (42 percent) "opted-in" and started the program. Participants who were referred, but did not start the program, voluntarily "opted-out," were subsequently deemed ineligible, had needs exceeding court resources, or were not mentally competent to continue.

Prior research indicates mental health courts are effective at reducing arrests and days of incarceration (Steadman et al. 2010). The Washington State Institute for Public Policy has classified mental health courts as an evidence-based practice (Wanner 2018).

[1] Aix I is a category of disorders defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). Examples of an Axis I disorder include: psychotic disorders, anxiety disorders, major depression, and bipolar disorders.
[2] The case must be prosecuted by the King County Prosecutor's Office.
[3] Includes a small number of participants (n=3) who started the program in 2011 and 2012.

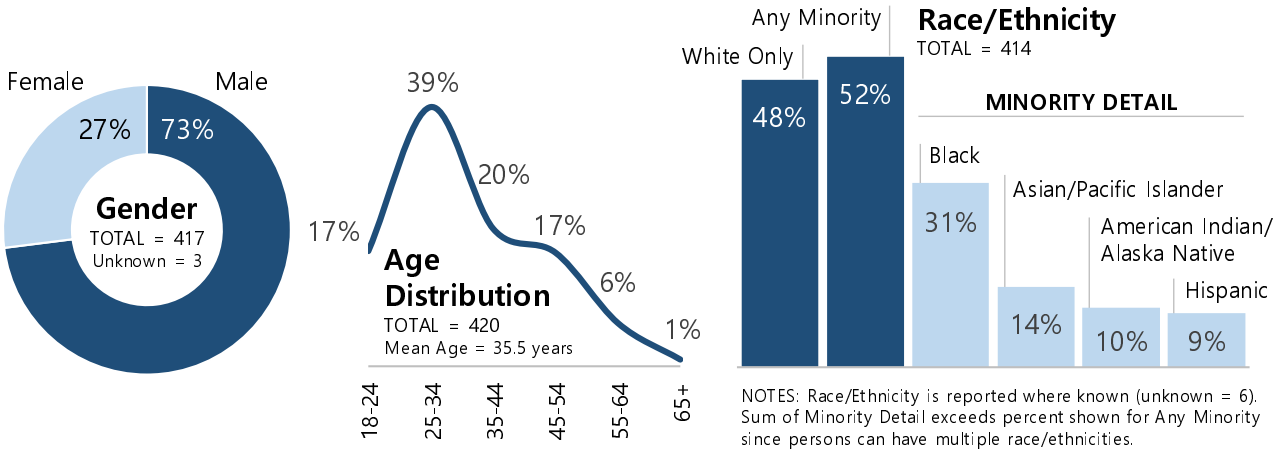
Demographics

The 420 individuals enrolled in the program between January 2013 to August 2017 were mostly male (73 percent, Figure 1). About half of participants were white, non-Hispanic (48 percent) and half (52 percent) minority. Participants were on average 35 years old when admitted to the program.

FIGURE 1.

Demographics of Mental Health Court Participants

King County District Court Regional Mental Health Court, January 2013 to August 2017, TOTAL = 420



NOTES: Race/Ethnicity is reported where known (unknown = 6). Sum of Minority Detail exceeds percent shown for Any Minority since persons can have multiple race/ethnicities.

Baseline Participant Characteristics

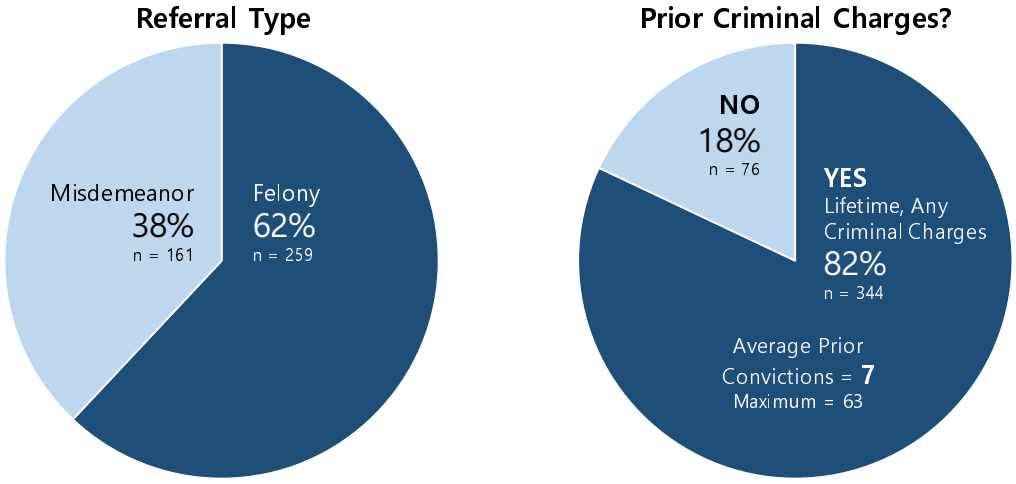
Criminal Involvement

The mental health court served primarily individuals charged with felony crimes (62 percent) versus less serious charges for misdemeanors (38 percent, Figure 2). Most participants had extensive prior involvement with the criminal justice system. The majority (82 percent) had at least one prior criminal charge. On average, participants had seven prior convictions in their lifetime.

FIGURE 2.

Current and Prior Criminal Involvement

King County District Court Regional Mental Health Court, January 2011 to August 2017, TOTAL = 420



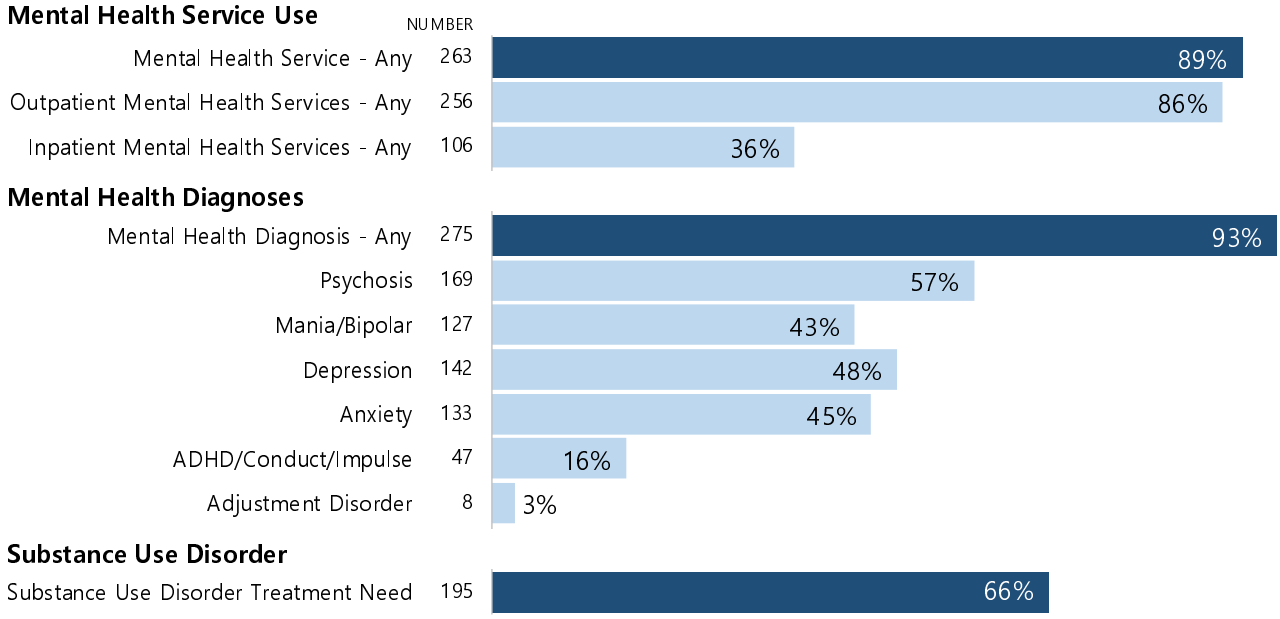
Behavioral Health Characteristics

The majority of participants were enrolled in Medicaid in the year prior to entering the program (70 percent, not shown). Among Medicaid enrollees, 86 percent had received mental health outpatient services in the prior year (Figure 3). Thirty-six percent had been hospitalized for inpatient psychiatric services. Over half (57 percent) had a diagnosis of psychosis. Other common diagnoses include: mania/bipolar (43 percent), depression (48 percent) and anxiety (45 percent). A large portion of participants had co-occurring substance use disorder treatment needs (66 percent).

FIGURE 3.

Behavioral Health Indicators

Among Medicaid Recipients, TOTAL = 297



Outcome Study Design

To assess the impact of the mental health court on recidivism and other key outcomes, we examined outcomes of 226 mental health court participants who started the court program in 2013 through 2016. Using administrative data and a standard matching algorithm, RDA identified a comparison group of 226 individuals charged with similar crimes in King County during the same timeframe, who were statistically similar with respect to available measures of mental health, criminal history, employment and other socio-economic characteristics, who were not referred to the mental health court and proceeded through a traditional criminal court or other program (see Appendix Table 1).

Outcomes were measured over a one-year follow-up period and included: new criminal charges filed in court, days of incarceration, behavioral health treatment, emergency department visits, and employment. For mental health court participants the outcome period began on the court start date. For the comparison group we calculated an equivalent starting point using the average amount of time between the filing of criminal charges to the start of mental health court (116 days). Secondary regression analyses were conducted to control for any residual differences between the groups and estimate the impact of the mental health court on outcomes. Matching variables and outcomes were measured using RDA's Integrated Client Databases, which contain integrated health, criminal justice, social service, and employment data.

Outcomes

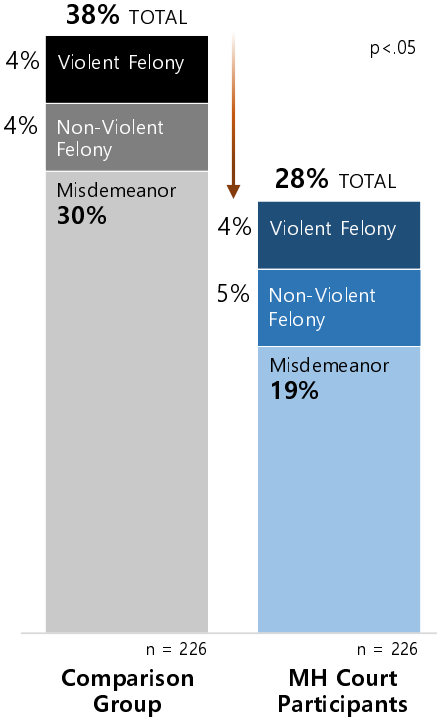
Criminal Justice Outcomes

One of the primary goals of mental health courts is to reduce future involvement with the criminal justice system. We examined two measures of recidivism over the one-year follow-up period to determine if participation in the therapeutic court reduced new criminal offenses: arrests reported by the Washington State Patrol and new criminal charges filed in court. We also examined the number of days incarcerated by the Department of Corrections or local jails which could have resulted from new criminal activity, a violation of community supervision conditions or an infraction issued by the mental health court.

Mental health court participation led to fewer arrests and charges for new crimes and reduced days of incarceration.

FIGURE 4.

Fewer New Criminal Charges



New Criminal Charges

Individuals who participated in the specialized court were significantly less likely to be charged with a new crime. Twenty-eight percent of mental health court participants were charged with a new crime during the one-year follow-up period, versus 38 percent of those in the comparison group (Figure 4). The decrease we observed in new charges was primarily among misdemeanor property crimes (theft) and assault.

Arrests

We found consistent results when we examined arrests in the outcome period. Mental health court participants were less likely than their comparison group peers to be re-arrested for a new crime (32 percent versus 42 percent of the comparison group, Figure 5). However, mental health court participants were more likely than their peers to be re-arrested for technical violations of their probation. Mental health court participants are supervised more closely than others and are required to appear in court regularly, comply with treatment and other conditions prescribed by the court and can be arrested for failing to follow those conditions. Overall, half (51 percent) of participants in both groups were re-arrested during the one year outcome period.

FIGURE 5.

No impact on Re-Arrest (Any Type)

Fewer Arrests for New Crimes

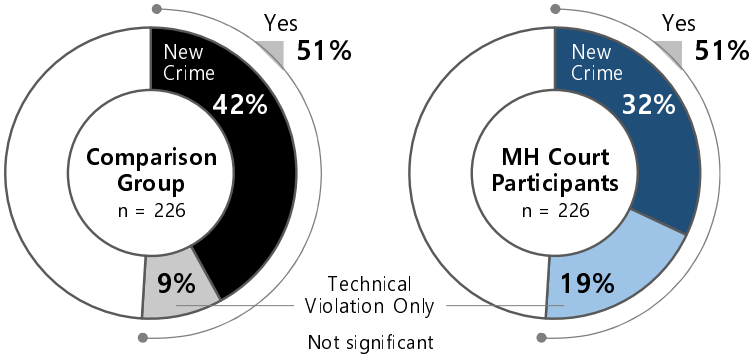
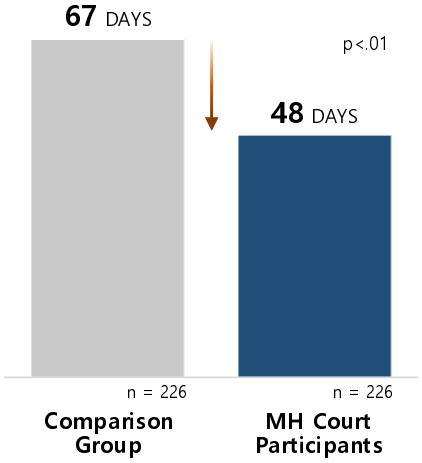


FIGURE 6.

Fewer Days of Incarceration



Because the two groups, may have experienced different amounts of time in the community, we calculated an annualized arrest rate for both groups.[4] Although the annualized arrest rate is slightly lower for mental health court participants (3.1 arrests versus 3.7 arrests for the comparison group) the difference was not statistically significant (not shown). We did not find significant differences between the two groups in the number of days from the court start date to the first new arrest (not shown).

Incarceration

Mental health court participants spent less time incarcerated in local jails or a Washington State Department of Corrections facility than their comparison group peers. Over the one year follow-up period, mental health court participants spent an average of 48 days incarcerated versus 67 days for the comparison group.

Behavioral Health Outcomes

For individuals participating in the mental health court, behavioral health treatment is mandated and enforced by the court. Treatment intensity and duration varies, as treatment plans are individualized based on each participant's mental health and substance use disorder treatment needs.

Mental Health Court participants received more outpatient mental health treatment, substance use disorder treatment, and had fewer inpatient psychiatric hospitalizations.

Mental health court participation led to an average of 28 additional days on which outpatient community-based mental health treatment services were received during the one-year follow-up. On average, the mental health court group participated in outpatient treatment services on 58 days, compared to 30 service days for the comparison group (Figure 7). We found fewer crisis service days for mental health court participants (0.25 versus 0.8 for the comparison group, Figure 8).

FIGURE 7.

28 More Mental Health Outpatient Treatment Service Days

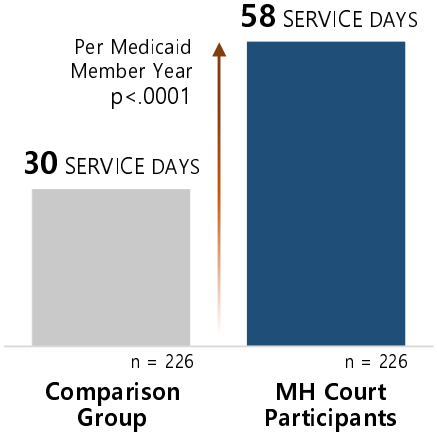
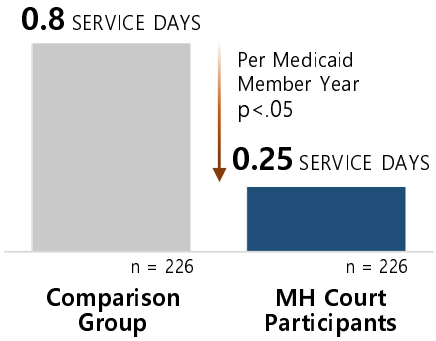


FIGURE 8.

Fewer Mental Health Crisis Service Days



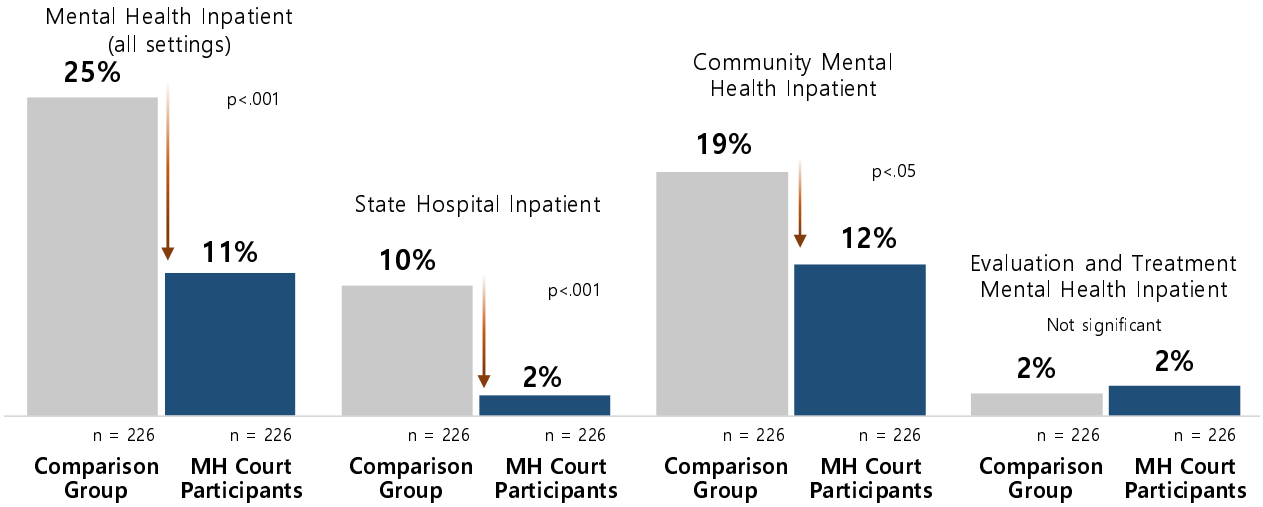
[4] The annualized arrest rate is measured by the number of arrests in the one-year follow-up corrected for time in the community or "at risk" of re-arrest. Time in jail, prison or a psychiatric hospital are excluded from time in the community. The annualized arrest rate was computed as the number of arrests in the outcome period, divided by days in the community and multiplied by 365. The annualized arrest rate is larger than the actual number of arrests experienced by both groups.

Inpatient Psychiatric Hospitalizations

Fewer mental health court participants had inpatient psychiatric hospitalizations (11 percent) compared to their peers (25 percent, Figure 9). Inpatient psychiatric stays include Western and Eastern State Hospital admissions, short-term community psychiatric hospitalizations (at for example, the Fairfax psychiatric unit at Providence Medical Center in Seattle) and inpatient stays at an evaluation and treatment facility. The mental health court significantly reduced the number of persons with an inpatient psychiatric stay.

FIGURE 9.

Fewer Inpatient Psychiatric Hospitalizations

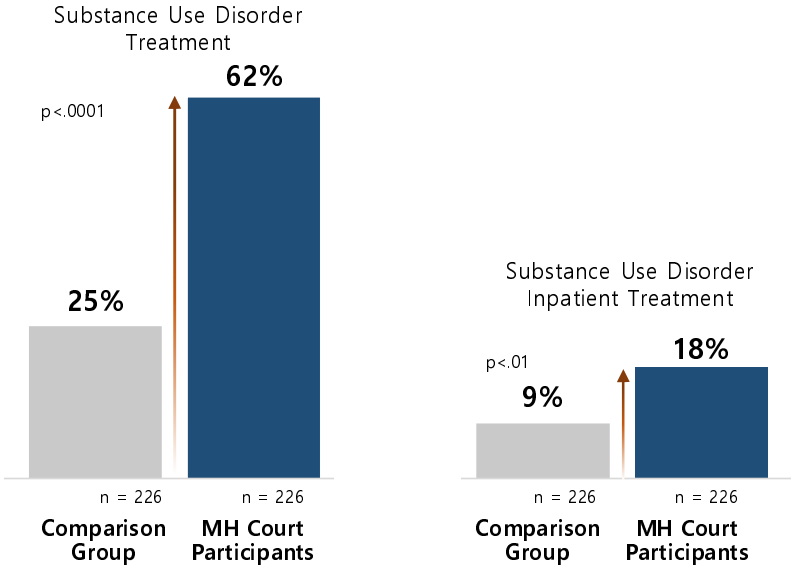


Substance Use Disorder Treatment Participation

Mental Health court participants were significantly more likely to participate in substance use disorder treatment during the follow-up period than their peers (62 percent versus 25 percent, Figure 10). Inpatient substance use disorder treatment was also more likely for the mental health court group (18 percent, compared to 9 percent).

FIGURE 10.

More Substance Use Disorder Treatment Participation



Emergency Department Utilization

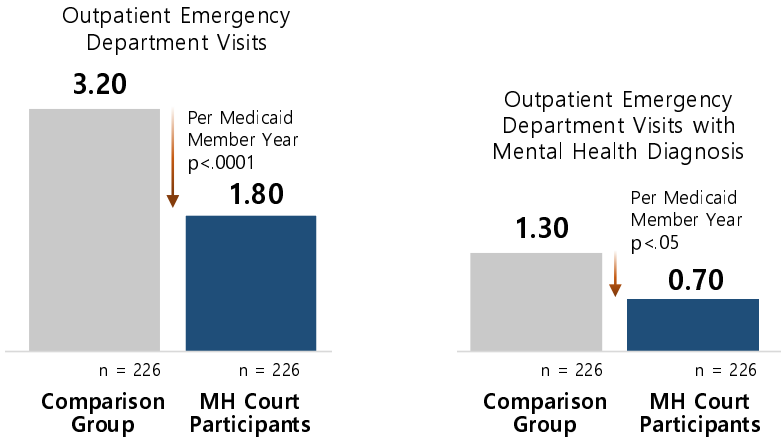
Therapeutic courts aim to stabilize individuals in the community, which may have an impact on health outcomes and emergency department utilization. We examined the prevalence of outpatient emergency department visits and outpatient emergency department visits with a mental health diagnoses for both groups during the one year follow-up period.

Mental Health Court participants experienced 1.4 fewer outpatient emergency department visits during the one year follow-up.

Mental health court participation led to significantly fewer outpatient emergency department visits (1.8 for the treatment group versus 3.2 for the comparison group, Figure 11). We also found significantly fewer emergency department visits with a mental health diagnosis.

FIGURE 11.

1.4 Fewer Emergency Department Visits

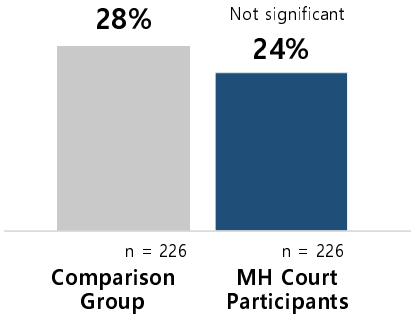


Employment

We did not find a significant difference between the two groups with respect to employment rates. During the one-year follow-up period, employment rates among both groups remained low. Twenty-four percent of mental health court participants were employed part-time or full-time at some point in the year following program admission, compared to 28 percent of their peers (Figure 12).

FIGURE 12.

No Impact on Employment



Study Limitations

Although the matching process used in this study controls for differences in observed characteristics, selection bias may remain due to unmeasured factors, particularly readiness or motivation to engage in treatment. Participation in the mental health court is voluntary and requires the participant to agree to treatment and an extended period of supervision by the court. In addition, the court screens out participants staff believe are not amenable to treatment. The comparison group may have included individuals lacking motivation to participate if referred to the program or who may have been screened-out by the court, impacting outcomes.

Discussion

The findings in this study indicate that the King County District Court Regional Mental Health Court is achieving the goal of reducing recidivism and improving community safety. Based on outcomes measuring new criminal activity (arrests and charges for new crimes) mental health court participants fared better than similar individuals who were not referred to the program and proceeded through traditional criminal proceedings. Notably, the court appears to be breaking the cycle of criminal involvement for a significant number of hard-to-serve individuals with extensive prior criminal justice involvement.

The mental health court also had a positive impact on connections with behavioral health treatment, facilitating increased engagement in outpatient community-based mental health and substance use disorder treatment. Connecting individuals to treatment in the community and using the court to enforce and supervise treatment compliance is likely resulting in increased stabilization, as evidenced by the reduction we found in use of crisis services, inpatient psychiatric hospitalizations and emergency departments.

Future research should examine a longer follow-up period to determine whether the program is having a lasting impact on outcomes. The high number of opt-outs or individuals referred to the program who don't participate also warrants a closer examination of barriers to program participation. More generally, mental health courts could benefit from research that examines who the intervention is most effective for and which elements of the court program are responsible for the positive outcomes.

The King County District Court Regional Mental Health Court made a significant positive impact across multiple domains for participants who engaged in the program. At the same time, the court is improving community safety by reducing new crimes, and reducing costly services for local and state government by decreasing days of incarceration (primarily for local jails), inpatient psychiatric hospitalizations and emergency department visits. A cost-benefit analysis was beyond the scope of this study. The positive findings reported here indicate that the King County District Court Regional Mental Health court warrants continued public policy support.

REFERENCES

Cohen, J.A (1992). A power primer. *Psychological Bulletin*, 112, 155-159.

Steadman, H., Relich, A., Callahan, L., Robbins, P., Vesselinov, R. (2010). Effect of mental health courts on arrests and jail days: A multisite study. *Archives of General Psychiatry*, 68(2), 167-172.

Wanner, P. (2018). Inventory of evidence-based, research-based and promising programs for adult correction (Document Number 18-02-1901). Olympia: Washington State Institute for Public Policy.

APPENDIX

Baseline Measures. Baseline characteristics of the 226 mental health court participants in the study population and the matched comparison group are shown in Table 1 below. The mental health court study group represents a subset of the total mental health court population presented in the first section of this report. The selected 226 are those clients with Medicaid enrollment and sufficient data in the follow-up period to measure outcomes. Additional details on the selection of the study population and construction of the matched comparison group can be found in the technical notes.

TABLE 1.

Baseline Measures for Mental Health Court Participants and Comparison Group

	Mental Health Court Group n = 226	Comparison Group n = 226
Demographics		
Average Age at Index	35.0	35.1
18-24	15%	16%
25-34	42%	40%
35-44	23%	19%
45-54	14%	18%
55-64	6%	6%
65 and over	0%	0%
Gender		
Male	75%	77%
Female	25%	23%
Race/Ethnicity		
Non-Hispanic white	43%	37%
Any minority	57%	63%
Minority Group (Categories not mutually exclusive)		
Black or African American	35%	39%
Asian or Pacific Islander	13%	13%
American Indian or Alaska Native	13%	12%
Hispanic or Latino	8%	10%
Index Month		
2013	14%	11%
2014	27%	31%
2015	27%	25%
2016	32%	34%
Current Offense[5]		
Misdemeanor	57%	55%
Alcohol	9%	11%
Property	19%	19%
Assault or Sex	27%	23%
Other[6]	2%	2%
Felony	43%	45%
Drug	3%	6%

[5] Offense type represents the original charging offense. For the mental health court group, felony charges were reduced to misdemeanors.

[6] Includes miscellaneous criminal charges, escape, criminal conduct and cruelty to animals.

	Mental Health Court Group n = 226	Comparison Group n = 226
Property	12%	13%
Assault or Other Violent	27%	25%
Other[7]	1%	1%
Health Care		
Average months Medicaid, prior 12-months	10.1	10.0
Medicaid, during index month	92%	89%
Disability-related medical coverage in index month	40%	38%
Dual medical eligibility, prior 12-months	16%	14%
Other Characteristics, Prior 12-months		
Economic Assistance		
Basic Food	88%	91%
Average months receiving Basic Food	8.6	8.6
Employment		
Any employment (part-time or full-time)	32%	34%
Average wages among those with employment	$5,282	$5,709
Average hours worked among those with employment	378	381
Unstably Housed	56%	58%
Criminal Justice History, Prior 12-months		
Arrests		
Any prior arrest	88%	83%
Number of prior arrests	2.3	2.1
Charges		
Any prior charges	92%	90%
Convictions		
Any prior conviction	87%	81%
Average number of prior convictions	1.9	1.6
Incarceration		
Any Department of Corrections (DOC) incarceration	2%	4%
Average number of DOC incarceration days	2.0	2.6
Prior jail incarceration, any	85%	82%
Average number of jail incarceration days	88.7	80.0
Criminal Justice History, Lifetime		
Prior convictions, any	99%	97%
Number of prior convictions	11.0	11.2
Average number of prior misdemeanor convictions	8.9	9.0
Average number of prior violent felony convictions	.52	.45
Average number of prior non-violent felony convictions	1.6	1.7
Age at first conviction	23.6	23.1
Behavioral Health, Prior 12-months		
Mental Health Treatment, Prescription or Diagnosis		
Mental Health Service, any type	89%	88%
Outpatient mental health service, any	87%	84%
Outpatient mental health treatment days, per Medicaid member month	3.3	3.7
Outpatient crisis services, any	36%	29%
Inpatient mental health service, any	37%	32%

[7] Includes escape, animal cruelty and other undefined felony charges.

	Mental Health Court Group n = 226	Comparison Group n = 226
State Hospital psychiatric inpatient service, any	12%	12%
Community hospital psychiatric inpatient service, any	25%	23%
Evaluation and Treatment services, any	6%	7%
Inpatient mental health treatment days per Medicaid member month	3.3	3.9
Mental Health Diagnosis, any	95%	96%
Psychotic	60%	55%
Mania/Bipolar	44%	43%
Depression	48%	45%
Anxiety	46%	48%
ADHD/Conduct/Impulse Disorder	16%	18%
Adjustment Disorder	3%	3%
Psychotropic Prescription Medications, any	66%	70%
Antipsychotic	52%	57%
Antimania	12%	14%
Antidepressant	39%	32%
Antianxiety	29%	30%
ADHD	4%	7%
Substance Use Disorder Treatment, Diagnosis or Arrest	73%	81%
Substance use disorder treatment services	29%	28%
Substance use disorder treatment service days, per Medicaid member month	.82	.73
Detox services, any	3%	1%
Medical History, Prior 12-months		
Outpatient emergency department visit, any	63%	65%
Outpatient emergency department visit with mental health diagnosis, any	39%	36%
Outpatient emergency department visits per Medicaid member year	2.9	3.0
Hospitalizations per Medicaid member year	.83	1.0
Chronic disease indicator, prior 24 months	48%	51%

NOTE: All differences had absolute standardized mean difference (ASMD) less than .2, indicating acceptable balance.

STUDY DESIGN AND OVERVIEW

We used a quasi-experimental design to examine outcomes for King County District Court Regional Mental Health Court participants, relative to a statistically matched comparison group. Outcomes were examined over a 12-month follow-up period that began on the court start date (index month) for mental health court participants and a similar calculated date for the comparison group. The mental health court group was identified from data provided by the King County District Court Regional Mental Health Court. A comparison pool was drawn from administrative data using the following parameters:

MENTAL HEALTH COURT GROUP

1. Started mental health court between 2013 and 2016.[8]
2. Enrolled in Medicaid.

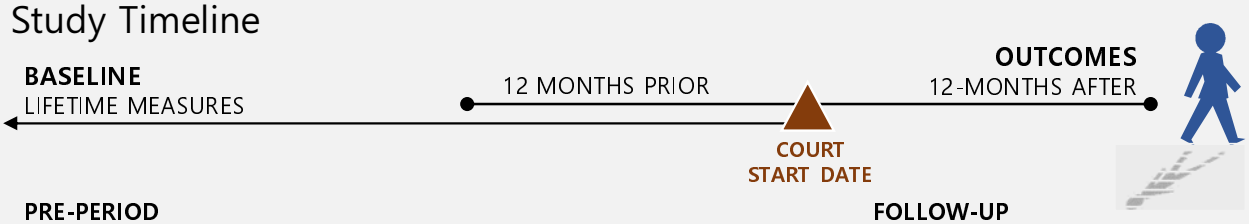
COMPARISON POOL

1. All adults (18 and over) with criminal charges similar to the treatment group, filed in King County during the same timeframe who were not referred to the mental health court.
2. Enrolled in Medicaid.
3. Had a mental health diagnosis, prescription or service recorded in administrative data during the prior 2 years.
4. In the community, at risk of re-arrest for at least one month during the outcome period.

Propensity score matching. To select individuals from the comparison group pool we employed a statistical technique called propensity score matching, which estimates the probability of treatment group participation using logistic regression with baseline measures as predictors. The propensity scores obtained from the model were used to select the matched comparison group using 1:1 nearest neighbor matching, where one comparison case was selected for each treatment case. To assess balance in baseline characteristics we examined the ASMD. All ASMD values were 2.0 or less, indicating good balance.[9] See Appendix Table 1 for baseline characteristics of the mental health court group and the matched comparison group.

Analytical approach. We assessed whether mental health court participation improved outcomes by examining regression models for each outcome variable. All outcomes were measured over a one year time period. For the treatment group the outcome period started when the participant started the mental health court program. An equivalent start date was calculated for the comparison group by adding the average number of days from the date criminal charges were filed to the program start date for participants (116 days). All of the outcome measures reported for the mental health court group are regression adjusted to control for residual differences between the treatment and comparison group after matching.

Study Timeline



PRE-PERIOD

LIFETIME MEASURES
- Criminal Justice Involvement

12 MONTHS PRIOR
- Criminal Justice Involvement
- Behavioral and Physical Health
- Medicaid Enrollment
- Economic Assistance
- Employment

FOLLOW-UP

12 MONTHS AFTER
- Criminal Justice Involvement
- Behavioral Health Treatment
- Emergency Department Use
- Employment

[8] Individuals who were referred to the mental health court, but who didn't start the program (opt-ed out) were excluded from the treatment group.

[9] Ideally, the ASMD value is small. ASMD values smaller than 0.20 are considered to indicate good balance (Cohen, 1992).

DATA SOURCES AND MEASURES

DSHS Integrated Client Databases and data provided by the King County District Court Regional Mental Health Court.

Demographics

- Gender, age and race/ethnicity were extracted from the DSHS Integrated Client Databases.

Economic Assistance

- Basic Food receipt was identified with data from the DSHS Automated Client Eligibility System (ACES).

Medical Indicators

- Medicaid enrollment reflects that a Medicaid Recipient Aid Category was recorded in ProviderOne.
- Hospitalizations and emergency department use were based on information from ProviderOne medical claims and encounters. ProviderOne is maintained by Washington's Health Care Authority. Utilization measures were calculated as the number of visits or admissions per member month to standardize for differences in the number of months of enrollment in Medicaid.
- The chronic illness indicator is based on health service diagnoses and pharmacy claim information. The score is calibrated to equal one for the average person in Washington State enrolled in the Social Security Insurance (SSI) disability program. We report the percent of individuals with a score of one or higher, meaning they had health service diagnoses and predicted costs similar or slightly greater than those enrolled in SSI disability.

Behavioral Health

- Outpatient mental health treatment includes counseling, medication monitoring and other treatment services provided in the community. Inpatient psychiatric hospitalizations include admissions to Western or Eastern State Hospital, community hospitals or an evaluation and treatment facility. Outpatient substance use disorder treatment includes individual or group treatment, medication assisted treatment and other alcohol or drug treatment services provided in the community. Inpatient substance use disorder treatment includes alcohol and drug treatment services provided in a residential setting.
- Mental health and substance use disorder treatment indicators were generated from multiple information systems: ProviderOne (medical), the Consumer Information System (mental health treatment records), the Treatment and Assessment Report Generation Tool (substance use disorder treatment records) and the Behavioral Health Data System (combined mental health and substance use disorder treatment records).
- Mental health and substance use disorder treatment need indicators are based on health and behavioral health diagnoses, prescription and treatment records. Drug and alcohol-related arrest data maintained by the Washington State Patrol were also used to identify probable substance use issues.

Employment

- Any history of employment, wages and hours were identified using data from the Washington State Employment Security Department. Individuals were considered employed if they had at least one quarter of non-zero earnings.

Housing

- Housing instability was derived from housing status recorded in the Automated Client Eligibility System (ACES) and services recorded in the Housing Management and Information System (HMIS).

Criminal Justice

- Arrests were identified from records in the Washington State Patrol (WSP) database. Arrests reported in the WSP database are primarily felonies and gross misdemeanors.
- Criminal charges and convictions were identified from Administrative Office of the Courts records, extracted from the Washington State Institute for Public Policy (WSIPP) Criminal History Database.
- Incarceration days includes time spent in both local jails and state prison (DOC). Local jail days were extracted from the Jail Booking and Release System (JBRS) and King County jail data. Department of Corrections (DOC) incarceration days were identified from prison inmate admission and release records provided by DOC.

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