Quality Improvement

Pilot Mental Health Offender Program Improves Participant Outcomes and Lowers Costs in a Large Urban County

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Abstract

Introduction
Mass incarceration, particularly of the mentally ill, continues to pervade our criminal justice system. Jails in many areas have become the largest mental health facilities, especially in large urban communities, despite increasing societal recognition that those with mental illness are not best served behind bars. Misdemeanors are an often-overlooked contributor to mass incarceration, and may be preventable for those with chronic severe mental illness.

Methods
This Northeast Florida pilot program, the Mental Health Offenders Program (MHOP), is based on the successful Miami Eleventh Circuit Court Criminal Mental Health Project. MHOP provided pretrial release from custody, through diversion with a customized plan of care to stabilize defendants, using court supervision to ensure compliance.

Results
With community partners, the MHOP pilot enrolled 20 individuals with chronic severe mental illness and recurrent misdemeanor charges; 15 were able to continue in the program with stabilization of their mental health and reduction of county costs both documented.

Conclusion
The MHOP pilot demonstrates that community resources can be successfully shifted to benefit mentally ill, non-violent offenders and the larger community by helping severely mentally ill clients achieve stability by providing healthcare, housing, and income, while decreasing costs for the community in a humane way.

Keywords
jail diversion; equity; minority; economic costs; prisons; correctional facilities; mental health; criminal law/statistics & numerical data; mental disorders/epidemiology; prisoners /statistics & numerical data; prisoners/psychology, prevalence

Introduction
The United States (US) is unprecedented worldwide in the number of individuals held in correctional settings, as there are almost 2.3 million people divided between 1833 state prisons, 110 federal prisons, 1772 juvenile correctional facilities, 3134 local jails, 218 immigration detention facilities, and 80 Indian Country jails, as well as in military prisons, civil commitment centers, state psychiatric hospitals, and prisons in the US territories.[1] Misdemeanors are an often-overlooked contributor to mass incarceration, with 13 million misdemeanor charges each year in the U.S.[1] A misdemeanor is commonly defined as a minor crime, punishable by a fine or a light jail term, typically under 12 months. Nationwide, over 25% of the daily jail population is incarcerated on a misdemeanor offense.[1]

A mental health offender (MHO) is an individual convicted of violent, non-violent, or sex-based felonies, when the crime was related to a severe mental disorder. Individuals with serious mental illness are 1.5 times more likely to be incarcerated as to be institutionalized for assessment and treatment of their psychiatric disorders.[2] Jails are now the largest mental health facility for the US, especially in large urban communities. According to a special report published by the Bureau of Justice Statistics, 43% of state and 23% of federal prisoners had a history of a mental health problem.[3] Furthermore, approximately 2 in 5 state prisoners (39%) and 1 in 5 federal prisoners (19%) reported ever staying overnight in a psychiatric hospital.[3] Equally disparate are the number of days offenders with mental health problems are jailed as well as the costs they accrue. According to the Treating Advocacy Center in Florida's Orange County Jail, the average stay in 2016 for all inmates was 26 days; for mentally ill inmates, it was almost double at 51 days.[3] In Broward County, Florida, it costs $80/day to house a regular inmate but $130/day for an inmate with mental illness.[4]

Reasons nationally for criminalization of the mentally ill include deinstitutionalization, restrictive civil commitment criteria, inadequate community support systems, lack of community response teams, and insufficient training for law enforcement.[5] Severe psychological distress is 3 to 5 times more likely in jail inmates and prisoners, compared to adults in the general US population.[6] Diagnoses vary; in one sample of 178 male inmates, the most prevalent diagnoses were schizophrenia, major depressive disorder, and bipolar disorder, accounting for 62% of primary DSM diagnoses, with rates of antisocial personality traits similar to those of a comparison psychiatric inpatient population.[7]

This pilot program, the Duval County Mental Health Offenders Program (MHOP), is based on the very successful Miami model initiated by Judge Steve Leifman in 2000: the Eleventh Circuit Court Criminal Mental Health Project (CMHP). A criminal justice diversion program, also commonly known as a pretrial diversion or an intervention program, typically includes pretrial sentencing of an offender to a program to improve behaviors that resulted in arrest; commonly they permit the offender to avoid conviction. The Miami jail diversion model, operating successfully for over 20 years, has reduced recidivism rates from 75% to 20% yearly.[8] Additionally, the CMHP also reported fewer jail bookings and less time spent in the county jail.[8] Further, CMHP is a cost-effective method to help mental health offenders through providing effective linkage to available services, rather than duplicating existing services.[8] Since the launch of the CMHP, "annual cost avoidance has been estimated at $12 million, due to a 45% lower jail population and the closure of a jail facility."[9]

The authors initiated this quality improvement pilot program to assess the utility and benefits of this diversion program as a joint project between multiple stakeholders.

Methods

This article reports purely descriptive demographic and outcome data, including economic parameters, as part of a quality improvement project undertaken by Sulzbacher Center, a Federally Qualified Healthcare Center in Jacksonville, Florida. The overarching goal of the project was to reduce county costs associated with non-violent, mentally ill individuals, by providing access to a wide range of services as outlined below. The objectives were to reduce costs within the county by reducing recidivism and hospitalizations and to reduce homelessness and improve stability by improving compliance with mental health treatment. The aims of this component of the project were to describe: who chooses to participate in a jail diversion program, among the potentially eligible homeless mentally ill individuals facing recurrent misdemeanor charges; their ability to participate in and cooperate with program and legal requirements; and the cost savings engendered by the program.

The MHOP pilot, set in Duval County, Jacksonville, Florida, was developed to provide up to 20 mentally ill misdemeanor defendants with pretrial release from custody, combined with diversion to a customized plan of care to stabilize them with court supervision to ensure compliance. Key county stakeholders included: the Duval County Judges, State Attorney's Office, Public Defender's Office, City of Jackson-

Patient name:_____ **DOB:**_____

Name of person completing:_____**Date:**_____

		Please Circle one	
1.	Acutely suicidal or homicidal?	Yes	No
2.	Willing to abide by terms of program?	Yes	No
3.	Willing to take injection if recommended?	Yes	No
4.	Primary diagnosis of substance use?	Yes	No
5.	Able to provide informed consent?	Yes	No

Comments:

Recommendation: Accept Decline

If yes to question 1 or 4, or no to any of the other questions, client not eligible.

Figure 1. The Bell Screener prepared for the jail diversion of mentally ill misdemeanor defendants.

ville, and the Jacksonville Sheriff's Office. Key community partners included the Sulzbacher Center (a Federally Qualified Healthcare Center and homeless shelter) and Gateway Community Services (a private non-profit drug and alcohol rehabilitation agency). State partners included Lutheran Services of Florida (1 of 7 Managing Entities who work together with the Florida Department of Children and Families to ensure access to evidence-based behavioral healthcare services for the uninsured indigent population).

The MHOP Program was funded through the City of Jacksonville and Jacksonville Sheriff's Office.

The selection and screening process for the pilot participants began with the Jacksonville Sheriff's Office, in conjunction with the State Attorney's Office, who created a list of criteria and flagged prospective participants in the jail database system for possible participation, inclusive of the following:

1. Defendant has a severe mental illness and requires intensive wraparound services.
2. Defendant has been arrested 4 or more times since 2017.
3. During each of the proceeding arrests, defendant had a mental health designation.
4. Defendant is not classified as a sexual offender or sexual predator by the Florida Department of Law Enforcement.
5. Defendant does not have an open felony case.
6. Defendant is not on felony probation or parole.
7. A prior felony conviction will not automatically exclude a defendant; however, defendants convicted of an offense listed in Section 948.06(8)(c), Florida Statutes, are ineligible for MHOP.

Upon the arrest of one of the participants on the list for a new charge of a non-violent misdemeanor (excluding driving under influence), eligible participants were identified in the jail by correctional personnel and referred to MHOP during First Appearance Court. A member of the Sulzbacher team then screened the client with a checklist (**Figure 1**). If the client freely screened as willing, and was eligible for the pilot, a Sulzbacher representative attended First Appearance Court with the client and recommended to the presiding Judge they enter the pilot program. If the Judge agreed,

the Judge released the defendant from jail to Sulzbacher custody. Sulzbacher had a minimum of a 2-week preliminary period to ascertain if the client was able to comply with the pilot program, including taking medications, working with the team, and staying in custody of Sulzbacher. If not, the State Attorney's Office would be notified for guidance.

If the client passed the initial screening tool and agreed to participate in the pilot, the public defender then obtained a signed Deferred Prosecution agreement from the client, also signed by a Sulzbacher representative, a public defender representative, a state attorney representative, the program coordinator, and Judge or Magistrate. Sulzbacher Center then provided case management, psychiatric and medical treatment, therapy, assistance with housing, and other wraparound services. The Court's role was to supervise participants throughout the duration of the program, which lasted until the participant was deemed stable psychiatrically, with income and permanent housing. Cases were reviewed every 2 to 6 weeks depending on the client's stability as recommended by the team in conjunction with the legal team. Participants who failed to comply were potentially subject to re-arrest depending on the charge. Participants who successfully completed the program had their case dismissed as part of the deferred prosecution agreement.

Data collected included the following variables: age, gender, race, diagnosis, income, housing status, number of arrests, referral date, number of days in jail, booking cost, total jail-related cost, number of involuntary psychiatric commitments (Baker Acts; up to a 72-hour hold for mental health evaluation in a licensed center) directly from jail to Mental Health Resource Center, or Baker Acts directly from jail to University of Florida Health (termed a "DN7" in legal speak), evaluation costs for Mental Health Resource Center or University of Florida Health, days in Mental Health Resource Center or University of Florida Health, total cost of admission to Mental Health Resource Center or University of Florida Health, and state hospital days (University of Florida Health is the medical network associated with the University of Florida, with hospitals in Gainesville and Jacksonville).

This pilot information is vitally important towards informing development of the next project capable of making a larger difference for these drastically underserved individuals and the Duval County taxpayer population as a whole. The program and data collection methodology were approved by the Sulzbacher Quality Management Committee. Deidentified data devoid of any personal health information was extracted from program records within Sulzbacher and the Duval County Courthouse.

Results

The pilot period began February 1, 2021, and ended September 30, 2021, for a total of 8 months. The initial list created by the Jacksonville Sheriff's Office for this pilot named 220 potentially eligible individuals. All clients eligible on re-arrest were further vetted by a state attorney prior to screening, for any additional charges they may have had since the list was created by the Jacksonville Sheriff's Office. The team screened 98 unique individuals in the Duval County Jail who were on the list and subsequently arrested on a qualifying misdemeanor charge. Of the 98, 58 were screened out due to legal history by the state attorney, 12 declined to participate and 28 individuals agreed to participate. Of the 28, 1 died of opioid overdose, 4 were diverted to the program but not yet accepted at the conclusion of pilot, 2 were diverted but were not accepted into pilot (one due to a subsequent felony charge, the other due to repeated noncompliance), and 3 were rejected after initial acceptance into the pilot (1 due to violence, 1 due to a felony charge, and 1 due to repeated noncompliance and property destruction).

The pilot population demographics show that 70% were male and 30% were female. Additionally, 75% of participants were Black, 15% Caucasian, 5% Hispanic, and 5% Native American (**Table 1**). At their start in the pilot program, 90% of participants were considered street homeless (n=18) and 10% were housed (n=2). Three pilot participants had previously been in the psychiatric state hospital system since the start of data collection (2017).

All of the pilot participants had severe and persistent mental illness with a primary diagnosis of either schizophrenia (n=15) or schi-

Table 1. MHOP Participant Demographic Characteristics

Age	
Age (years), mean (SD)	40.9 (10.33)
Age range (years)	24-60
Gender	
Male, n (%)	14 (70)
Female, n (%)	6 (30)
Ethnicity	
Black, n (%)	15 (75)
Caucasian, n (%)	3 (15)
Hispanic, n (%)	1 (5)
Native American, n (%)	1 (5)
Diagnosis	
Schizophrenia, n (%)	15 (75)
Schizoaffective, n (%)	5 (25)
Income	
SSI, n (%)	6 (30)
No income or SSI, n (%)	14 (70)
Housing status	
Homeless, n (%)	18 (90)

Abbreviations: SD = standard deviation, n = number of subjects, % = percentage, SSI = Social Security Income

zoaffective disorder (n=5). The vast majority of individuals were psychiatrically treated using a long-acting injectable; 55% received paliperidone (n=11), 20% received haloperidol (n=4), 15% received aripiprazole (n=3), and 10% received oral antipsychotic agents (clozapine [n=1] and quetiapine [n=1]).

At the conclusion of the pilot, 87% (n=13) were in permanent housing, and 13% (n=2) were in temporary housing awaiting a permanent home. Due to the level of severity of mental illness, none of the pilot participants were able to be gainfully employed. At the conclusion of the pilot, 73.3% (n=11) of participants were receiving disability benefits, and 26.7% (n=4) had benefits pending.

To calculate the savings due to the pilot program, costs were determined for booking, days in jail, psychiatric hospital evaluations from clients sent directly from jail (DN7), and their subsequent hospital stays. The total cost for the 20 pilot participants in 2020 was $362 218 and for the 20 participants in 2021 prior to entry into Mental Health Offender Program was $57 748. The 20 includes the participants officially entered into the program, 5 of whom were exited (4 suspended, 1 passed away). After entry into program the community costs were $12 631 (**Figure 2**). Cost trends for the 20 individuals are shown in **Figure 3**.

The monthly average arrest rate dropped 81% for the pilot participants, along with an 88% drop in the monthly average of days in jail, an 80% decrease in monthly average costs for arrest in booking process, an 86% drop in monthly average cost of jail stay, and a 100% drop in DN7s (n=20).

Discussion

About 41% of individuals identified by the Jacksonville Sheriff's Office upon arrest were acceptable based on legal history (per state attorney) to be in the pilot program. Of those eligible to be approached by the MHOP team, 70% agreed to participate. The overrepresentation of persons of color and those in poverty in the US correctional system was reflected in the data. Persons of color are overrepresented

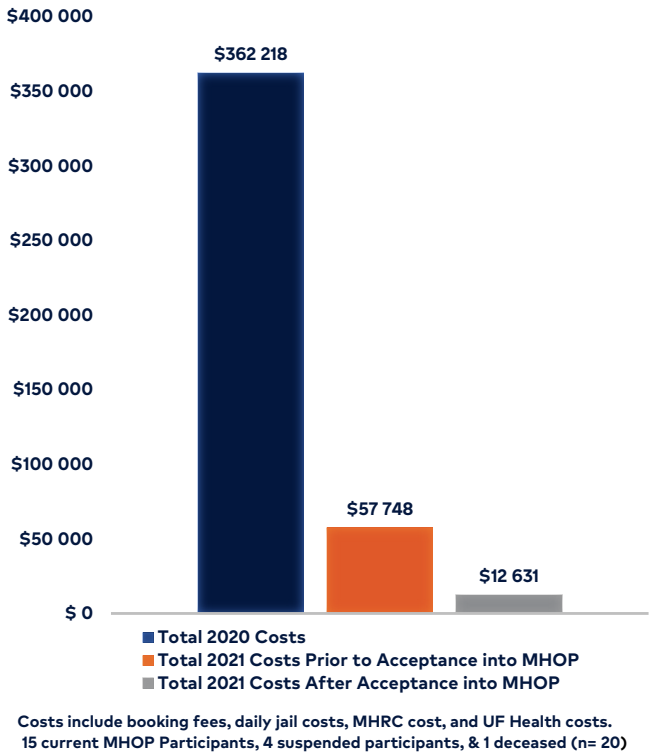

Figure 2. The MHOP participant costs to the county/government are shown before (total 2020 costs and cost prior to acceptance into the program) and after program implementation.

in correctional settings in the US, most notably for Black Americans, who, despite representing only 13% of US residents, make up 40% of the imprisoned population.[1,10]

Only 2 individuals had housing. The pilot program otherwise met their immediate needs of housing (often initially in the form of motels), food, medication, therapy, and clothing (including socks and underwear) while establishing with them a path to long-term resources and stability. Initially, based on the list Jacksonville Sheriff's Office created, it was estimated that about 47% of individuals would already be housed, based on the clients having what appeared to be a permanent address in Clerk Online Resource ePortal records. However, this proved not to be the case. A possible explanation could be that the pilot was done during the COVID-19 pandemic, and misdemeanor arrests were not as frequent unless the individual was a public nuisance. Also, many individuals may have previously had housing, but due to their severe mental illness and growing housing shortages in Northeast Florida, may have lost their housing. According to an article published in 2021 there is increased homelessness in people with substance use disorder and schizophrenia spectrum disorder.[11]

The authors did not expect to have predominately schizophrenia or schizoaffective disorder as the main diagnoses. The team expected more prevalent conditions such as major depression or bipolar disorder. A possible explanation is that to be labeled "mental health" by the jail psychiatry team, they had to be noticeably ill (ie, responding to internal stimuli, or disorganized). High rates of incarceration and serious mental illness (which includes primarily schizophrenia and schizoaffective disorder) has been reported as prevalent among the Black population.[12] The severity of illness of the participants was comparable to those in state psychiatric hospitals. In fact, 20 of the individuals on the original list of 220 names were actually in state psychiatric hospitals as of March, 2021, and 3 in the pilot had recently been in a state psychiatric hospital.

It was also quickly realized that long-acting injectable antipsychotics (LAIs) were key to a client's success and ability to participate in the pilot program (due to noncompliance,

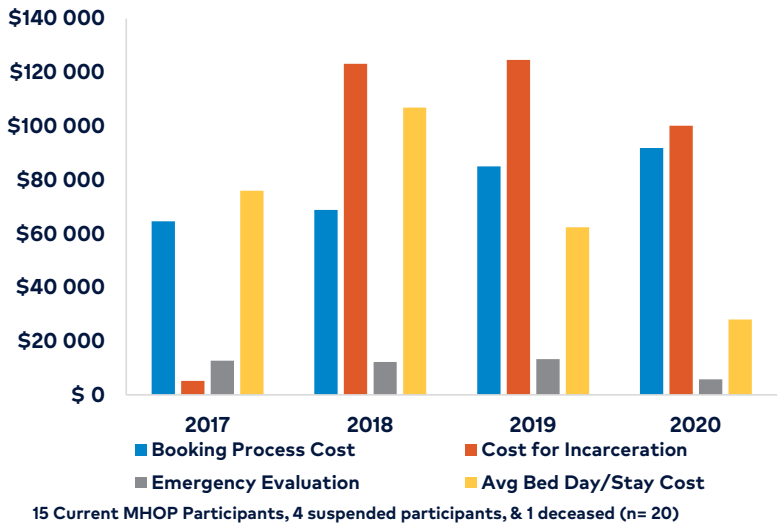

Figure 3. The overall county/government cost trends for MHOP participants from 2017-2020.

homelessness, and eloping from the program with no phone or way to reach them). LAIs can reduce hospitalization risk and increase medication adherence.[13-15] Based on observation and reports from the literature, the mental health team decided early on that best practice for everyone in the pilot program with a diagnosis of schizophrenia or schizoaffective disorder would be a requirement to be on a LAI and this became part of the screening criteria.

Another unexpected finding was that of the 98 individuals first screened for the program on arrest by the Jacksonville Sheriff's Office, a much lower number of 40 (41%) ended up being eligible after further vetting by the state attorney's office on their past legal history. Of those 40, only 28 initially agreed (70% acceptance rate), despite all being told they would receive housing, help with applying for benefits, and healthcare treatment, as well as clothing and food. Building rapport and trust was key and many clients had not met any team members before and were understandably wary. Often, the team had to repeatedly engage with them, and promote the pilot program to them, rather than their readily accepting all the help and resources the program could provide. Some were too ill and/or disorganized to agree to the diversion in writing. Some of these who could not participate were placed into acute mental hospitalization through the Baker Act directly from First Appearance Court (DN7) and sent to a local Baker Act receiving facility. Some who did agree and were released to Sulzbacher required an immediate Baker Act for stabilization, in that, although they agreed to take an injection upon screening, they then refused and were considered dangerous to themselves, others, or unable to sufficiently care for themselves. Thus, a lesson learned for future planning is having mechanisms in place to provide assessment and transportation for urgent, acute stabilization.

As a notable case success, this pilot program was able to help a gentleman who had been arrested 97 times since 2017, become psychiatrically stabilized. He was initially shoeless and floridly psychotic, presenting as nonverbal, covered in his own feces, unaware of the cold or the elements, and sleeping in dumpsters. With program assistance, he was able to gain improved hygiene and communication skills and accept housing in an Assisted Living Facility, with no re-arrests as of the date of this publication.

Limitations

Limitations of this pilot program included not obtaining pre-post quality of life measures or other formal rating forms/self-report data or satisfaction measures by the client, or community partners. Furthermore, estimated costs of the management for the participants were made during different phases of the pandemic;

therefore, controlling for effects of the pandemic on the outcomes was not possible. From a larger sociologic perspective, these data apply to those with only misdemeanor charges who were well enough to be accepted into the pilot; those with current felony involvement were excluded. Items 2 and 3 in the selection criteria above further restricted the group of eligible clients. Comparator work on whether the number of misdemeanors or when a diagnosis was made makes a difference in selection and acceptance rates and outcome should be undertaken, as it is possible that many disorders have been present and not yet diagnosed.

Another limitation was not having a comparison group, such as court offenders not agreeing to participate in the pilot program, or misdemeanor offenders that were not MHOP candidates. Since this is a QI pilot project and the total number of participants were low and only represented schizophrenia spectrum disorders, it is difficult to generalize to other populations of those with mental illness; however, those with bipolar disorder are known to respond to LAIs and may also have improved outcomes. These are areas of future study, as the pilot is now continuing and expanding.

Conclusion

This initial pilot phase of the MHOP demonstrates feasibility and positive outcomes: that community resources can be successfully shifted to be used to benefit the client as well as the entire county community by helping severely mentally ill clients achieve stability in access to healthcare with improved mental health, housing, and income, with lowered costs to the community in a more humane manner (as compared to the usual legal processing). Success for the project required community collaboration; partnership of many stakeholders was needed, as well as involvement of community champions in positions of influence and authority, such as the Chief Judge and local politicians. Since the pilot launched, the team has been able to successfully raise $1.3 million to continue and expand this program over the coming year. One of the immediate lessons learned was that the individuals being referred did indeed all have severe and persistent mental illness, and required intensive team support and engagement. The level of illness and homelessness was greater than initially expected, and will inform process planning and service delivery expectations moving forward. The Jacksonville community came together to help those, whom all the stakeholders agreed, did not belong in jail.

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Conflicts of Interest

Drs Bell and Raza and Mr. Kilcrease declare they have no conflicts of interest.

Dr Gracious reports personal fees from Novo Nordisc.

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