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# Sharing Behavioral Health Information Across Justice and Health Systems:

Opportunities in the District of Columbia

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#### Introduction

eople with mental health and substance use problems are overrepresented at all stages of the criminal justice system in the United States.<sup>1</sup> Across the country, law enforcement officers are frequently the first responders to mental health crises and, in the absence of a robust community health care system, jails and prisons have become providers of last resort for people with behavioral health conditions.<sup>2</sup> Data collected from jails and prisons nationwide reinforces the severity of the issue. The most recent data from the Bureau of Justice Statistics (BJS), a component of the U.S. Department of Justice's Office of Justice Programs, estimates that about 26 percent of people incarcerated in jail meet the threshold for serious psychological distress (SPD) and that 63 percent of people serving sentences in jail meet the criteria for drug dependence or abuse.3 About 5 percent of adults in the general population meet the criteria for SPD and 6 percent for drug dependence or abuse.<sup>4</sup> Therefore, the BJS estimates are approximately five times higher for SPD and 11 times higher for drug dependence or abuse than rates in the general population.5

The reasons for the overrepresentation of people with mental illnesses and substance use disorders in the criminal justice system are complex. In addition to the lack of community treatment capacity, people with behavioral health problems often face social and economic disadvantages, including unstable employment, inadequate housing, and histories of trauma, which put them at increased risk for criminal justice involvement. Yet the justice system remains underequipped to provide comprehensive behavioral health care or appropriate coordination of care across agencies. The BJS report estimates that only 34 percent of people in jail with SPD had received treatment since admission and that 22 percent of people in jail who met criteria for drug dependence or abuse participated in a drug treatment program.

To reduce the overrepresentation of people with mental illnesses and substance use disorders in the justice system, jurisdictions are increasingly focused on designing interventions that foster coordination and collaboration across criminal justice, health, and other social service sectors. Many communities are specifically interested in sharing information about people passing through the justice system in order to identify those with behavioral health problems earlier and provide effective continuity of care.<sup>8</sup>

Nonetheless, sharing information about mental health and substance use remains a challenge across the United States.<sup>9</sup> Although justice and health agencies in the District of Columbia (D.C.) are pursuing this issue, currently they do not routinely share information about people passing through the system; as a result, knowledge about those people—and therefore the provision of care—remains fragmented. Moreover, evidence of the extent to which data could be shared is largely anecdotal.

It is crucial to share behavioral health information (BHI) securely and ethically across the criminal justice and health systems. However, it is also important to acknowledge the barriers that must be addressed before this goal can be achieved. Failing to ensure the confidentiality of this deeply sensitive data could leave a swath of negative consequences for people who have or potentially have behavioral health conditions. In addition to social stigma, the impacts of such disclosures can hinder a person's legal rights, access to their children, employment and educational opportunities, and more. Any expansion of access to BHI should go along with robust privacy protections, which will require investments in technology and other infrastructure. 10

To inform ongoing efforts in D.C., this study systematically assesses the scope of behavioral health information in the D.C. justice and health systems and provides empirical evidence of potential avenues for sharing that data across sectors and agencies. Building on *Closing the Gap*, the Vera Institute of Justice's (Vera's) 2012 report on mental health information sharing in D.C., the current study uses administrative data from six government agencies to track the availability of BHI for a cohort of people arrested by the Metropolitan Police Department of the District of Columbia (MPD) in October 2012.<sup>11</sup> In addition to the arrest data provided by MPD, data on BHI for the period 2006 to 2014 was provided by the Pretrial Services Agency for the District of Columbia (PSA), the Department of Corrections (DOC), the Court Services and Offender Supervision Agency (CSOSA), the Department of Behavioral Health (DBH), and the Department of Health Care Finance (DHCF). The study assesses opportunities for sharing information about the potential behavioral health needs of justice-involved people in D.C. by investigating the following questions:

- > To what extent do justice and health agencies hold BHI about people passing through the justice system?
- > What is the potential for sharing BHI across agencies?
- > What is the potential for sharing BHI to improve Medicaid enrollment and the receipt of Medicaid services among people returning to their communities?
- Which demographic groups may benefit most from improvements in sharing BHI?

### Background

he D.C. justice and health sectors have been engaged in cross-system collaborative work for several years. For example, the Criminal Justice Coordinating Council (CJCC) established the Substance Abuse Treatment and Mental Health Services Integration Taskforce in 2006 to address the need for preventive and diversion services for individuals with serious mental illnesses or co-occurring mental health and substance use disorders. It also developed the Justice Information System (JUSTIS) to facilitate targeted information sharing among member agencies.

Vera's 2012 report described significant opportunities for sharing mental health information among D.C. justice agencies.<sup>12</sup> It found that, for a cohort of people arrested in June 2008 who had pre-existing BHI, probation, pretrial services, and the jail generated new BHI during agency contact for about half the group (54 percent).<sup>13</sup> The high proportion of people with pre-existing mental health information, compared with the relatively low proportion of people with mental health information generated during agency contact, suggested the potential for expanded communication among mental health and criminal justice agencies in order to coordinate the provision of treatment and other supportive services.

Following the 2012 Vera report, the CJCC obtained a grant from the Bureau of Justice Assistance (BJA) to better understand the mental health information being collected and shared among the District's criminal justice agencies and to make recommendations for improvements. The resulting report, *Mental Health Information Sharing in the District of Columbia Criminal Justice System*, described key mechanisms and challenges to the production and sharing of improved real-time data. It also identified five key pieces of mental health information, which are considered the minimum that should follow a person through the justice system: risk of suicide or self-harm, risk of harm to others, diagnosis of a serious mental illness, essential medical treatment, and essential medications. While the report built on the opportunities for sharing data identified by the Vera study, it also recognized significant barriers to implementation. These include the need to ensure confidentiality and to expand infrastructure so that data can be captured and transmitted securely.

#### Contribution of the current study

The current study, funded by BJA, examined available BHI for a cohort of people arrested in the District in October 2012. Specifically, it sought to understand the extent to which justice and health agencies held BHI about people passing through the justice system and what possibilities there were to access that data to inform justice and behavioral health decisions about those clients. This research extends Vera's previous work by using improved data and measures. It includes:

- > data from a more recent arrest cohort (October 2012), matched with justice and health information from 2006 through 2014;
- more expansive behavioral health care data through the addition of Medicaid claims and enrollment data from the DHCF;
- > a global measure of BHI, constructed to capture the wide variation in sources and types of behavioral health information available; and
- > data on both mental health and substance use information, to capture the broad spectrum of potential behavioral health problems people experience and more accurately reflect the challenges and opportunities faced by justice-involved people and the justice and health systems.

# Conceptualizing behavioral health information

In 2013, D.C. merged its Department of Mental Health and the Addiction Prevention and Recovery Administration to form the Department of Behavioral Health, based on studies showing a strong association between mental illness and addiction. <sup>15</sup> The umbrella term behavioral health now commonly refers to both mental health and substance use, although the two issues can have important differences. The federal government's Substance Abuse and Mental Health Services Administration defines behavioral health problems as those that include "substance use disorders; alcohol and drug addiction; and serious psychological distress, suicide, and mental disorders." <sup>16</sup> In this study, *behavioral health information (BHI)* was conceptualized as key knowledge gathered by each agency that could influence justice and health

decisions about people with potential mental health or substance use problems. The premise of the study is that if BHI were more accessible from the moment a person comes into contact with any single agency in the justice system throughout that encounter, it could assist agency staff in making coherent, effective decisions about diversion and treatment for arrested people. Access to historical BHI is particularly important because of the episodic nature of many conditions—meaning a person may be in remission or their symptoms may not be severe enough at assessment to result in referral for treatment. Further, a person may hide their symptoms for fear of stigma and other negative consequences. Under these conditions, access to a client's behavioral health history could increase the likelihood of continuity of care as well as play a role in stabilizing their health and living conditions.

Vera asked the health and justice agencies to identify data sources and key variables related to BHI. The result was a wide array of clinical and nonclinical information that reflected the diverse functions, needs, and resources of each agency. For many reasons, the agencies may provide different BHI today than they did at the time Vera requested the data. Technology for gathering BHI—and often the data itself—has evolved over the past decade. Changes in programs, policies, politics, and personnel have occurred in the intervening years, along with emerging knowledge about behavioral health conditions.

It is important to underscore that the term BHI used in this study (and the constructed BHI indicator) should not be interpreted as a measure of serious mental illness; nor does the extent of behavioral health information reported in the findings represent rates of either mental illness or substance use. Estimating the prevalence of behavioral health conditions requires the consistent use of valid and reliable tools to assess the behavioral health status of the entire population or a representative sample, which is beyond the scope of the current study (nor is this data collected across the D.C. justice system today). Rather, this research examines the availability of heterogeneous information that can provide critical input to decisions about people with potential behavioral health needs.

### Methodology

This section first summarizes the data and how it was collected and prepared for analysis. Next, it explains how the main variable of interest, BHI, was operationalized, followed by a description of the demographic

and justice variables used in the analysis. The section concludes with the analytic strategy for examining potential opportunities to share BHI among agencies and to use BHI to expand Medicaid enrollment and service uptake after a person is released from DOC custody.

#### Data sources and collection

Six agencies provided data for all people who were arrested in D.C. in October 2012. BHI was requested for this cohort from 2006 to 2014.

- > The Metropolitan Police Department of the District of Columbia (MPD) provided data on the October 2012 arrest cohort, including demographic and justice information.
- > The Pretrial Services Agency for the District of Columbia (PSA) is the federal agency responsible for gathering information about arrestees at lockup and preparing reports that provide the release recommendations judicial officers consider when deciding among release options. PSA also supervises defendants released to the community with conditions imposed by the court.
- > The District of Columbia Department of Corrections (DOC) is responsible for the adult jails and Central Cell Block operations (which houses adults arrested for noncitationable offenses and people being held for the United States Marshals Service pending arraignment, typically overnight). The DOC also contracts administration of a small number of halfway-house beds at two privately operated, community-based halfway houses in the District of Columbia.
- > The Court Services and Offender Supervision Agency for the District of Columbia (CSOSA) is a federal agency that supervises adults released by the Superior Court for the District of Columbia on probation and those released by the U.S. Parole Commission on parole or supervised release, as well as a smaller number of offenders sentenced under deferred sentence agreements and clients with civil protection orders. CSOSA conducts drug testing and offers both substance use and mental health treatment as part of its community supervision program.

- > The Department of Behavioral Health (DBH) develops, manages, and oversees the public behavioral health system for the District of Columbia. One of the populations DBH serves is adults with behavioral health disorders who have committed or who are accused of committing a criminal offense.
- > The Department of Health Care Finance (DHCF) is D.C.'s jurisdictional Medicaid agency. DHCF determines which behavioral health care services are covered and sets reimbursement rates for services provided.

Data collection and preparation for analysis involved several steps. MPD provided each of the other five agencies with identification numbers for the October 2012 arrest cohort. Each agency then collected the relevant behavioral health data for each member of the arrest cohort who encountered that agency at any point during the study period (2006 to 2014). Justice agencies also provided justice and demographic data. Next, to protect the privacy of the arrest cohort, the six agencies de-identified their data and securely transmitted the de-identified data to Vera. Finally, Vera merged the data from all six agencies and analyzed it.

#### Study cohorts

October 2012 arrest cohort. The sample for the arrest cohort was drawn from data provided by MPD on all people arrested in October 2012. Some people were arrested more than once in October 2012. In these cases, the analyses focused on the last arrest. The research emphasis in this study was justice-involved adults who are eligible for publicly funded behavioral health services in D.C. Therefore, the study arrest cohort excluded people under age 18 and nonresidents of D.C. Residency was unknown for a substantial number of arrestees (1,134) due to missing zip codes in the MPD data. After conducting a sensitivity analysis using demographic data from the DOC, which suggested that the majority of people with missing zip codes were D.C. residents, this group was included in the study arrest cohort. The study excluded a total of 488 people who were arrested in October 2012: two people were under 18 years of age, and a further 486 had non-D.C. zip codes. This report refers to the final study sample, comprised of 2, 349 unique people, as the October 2012 arrest cohort.

*Justice agency cohorts.* As Table 1 below shows, each of the partner agencies provided BHI for the people from the arrest cohort who encountered that agency as the result of their October 2012 arrest. This report refers to these groups of people as the agency cohorts.

Table 1. Justice agency cohorts: People who encountered the justice agencies as a result of their October 2012 arrest

Pretrial Services Agency for the District of Columbia (PSA)	N=1,113
District of Columbia Department of Corrections (DOC)	N=763
Court Services and Offender Supervision Agency for the District of Columbia (CSOSA)	N=1,343
No information about post-arrest contact with PSA, DOC, or CSOSA	N=622

# Main variable of interest: Behavioral health information

As described above, this study operationalized BHI as a global indicator based on a wide array of data and measures related to mental health and substance use. The information was derived from a variety of sources including screening tools, validated instruments, indicators of service referral and provision (medication and therapy), nonclinical observation, court-ordered special conditions, and health care billing records. A range of personnel at each agency generated the data, such as physicians, psychiatrists, social workers, nonclinical staff, community supervision officers, service providers, and judges. The data covered a wide spectrum of conditions, from serious and persistent disorders to others that were moderate to mild in severity and that may have been episodic or in remission. Moreover, some of these conditions may have had recent onsets so their course would be undetermined. The data shown in Table 2 included the date of each behavioral health event. DSM-IV refers to assessments and services based on criteria from the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).<sup>18</sup> Similarly, ICD-9 refers to the ninth edition of the *International Classification of* Diseases.19 The study used the diverse datasets listed below to construct a set of dichotomous BHI measures (yes or no) for each person arrested.20

Table 2. Behavioral health information provided by the justice and health agencies\*

Metropolitan Police Department	> No BHI provided		
Pretrial Services Agency	> Nonclinical service referral		
Dept. of Corrections	> Assessment based on DSM-IV and ICD-9 codes		
Court Services and Offender Supervision	> Judges' special conditions for behavioral health supervision, assessments, and treatment		
Agency	> Community supervision officers' referrals for services		
	Assignment to supervision staff whose specialized role is behavioral health		
Department of	> Assessment		
Behavioral Health	> Inpatient treatment		
	> Medication		
	> Services		
	All the above are based on DSM-IV and ICD-9 codes.		
Department of	> Medicaid enrollment		
Health Care Finance	> Medicaid claims		

<sup>\*</sup>Behavioral health information includes the date of each behavioral health event.

#### Demographic and justice variables

In addition to BHI, the Metropolitan Police Department provided demographic information on the arrest cohort. These variables included sex (male, female); race/ethnicity (black, Latino, Asian, white, other); and age at arrest (18 to 20, 21 to 24, 25 to 29, 30 to 39, 40 to 49, and 50-plus years).

The justice agencies provided information about the arrest and the person's encounter with the agency. These variables included date of arrest, dates of agency contact, and the most serious offense with which each person was charged at arrest/booking. This study used the same offense categories as Vera's 2012 report on sharing mental health information: drug, violent, traffic, public order, release violation/fugitive, property, other misdemeanors, weapons, and other felonies.<sup>21</sup>

#### Analytic strategy

## Definitions: Pre-existing BHI, BHI during agency contact, and follow-up BHI

The behavioral health data included the date attached to each behavioral health event, which allowed Vera to identify specific periods during which BHI was generated for a client. Two periods were key to the justice agency analyses described below. First, *pre-existing BHI* was specified as information generated by any of the justice and health agencies from the beginning of the study (2006) up to the date the client first encountered a particular justice agency as a result of the October 2012 arrest. Second, *BHI during agency contact* refers to information generated by that justice agency from the date the client first encountered the agency as a result of the October 2012 arrest through either the end of agency contact for that arrest or the end of the study period—2014.

To illustrate, if a person were arrested in October 2012 and encountered PSA as a result of that arrest, their pre-existing BHI would include all available information generated by the health and justice agencies from 2006 to the first day they encountered PSA for that arrest. Their BHI during agency contact would include any additional information generated by PSA during the time the person was engaged with them for the October 2012 arrest.

The term *follow-up BHI* is used when people had both pre-existing BHI and BHI generated during agency contact. By contrast, some people did not have follow-up BHI: they had only pre-existing BHI. The analytic strategy compares these two groups.

#### Four-step analytic strategy (Figure 1)

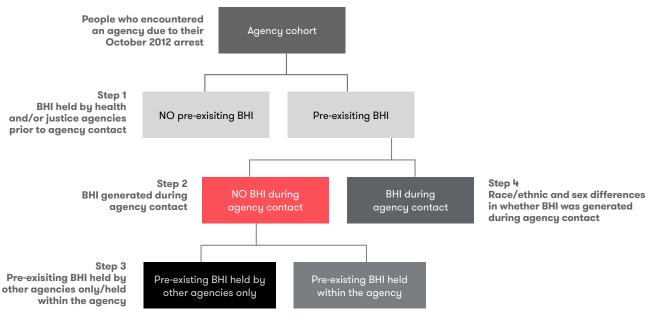
- 1. First, researchers identified people in the agency cohort for whom the health and justice agencies held pre-existing BHI. Again, this term refers to BHI generated between 2006 (the beginning of the study period) and the time people first encountered the agency due to the October 2012 arrest.
- 2. Next, researchers stratified people with pre-existing BHI into two categories: i) those for whom BHI was generated during agency contact for their October 2012 arrest, and ii) those for whom BHI was not generated during agency contact. The latter group (seen in the red box in Figure 1) is at the heart of the matter because it demonstrates the potential for sharing BHI.

- 3. Third, researchers examined two potential avenues for accessing pre-existing BHI for people for whom the agency did not generate BHI during contact: i) looking within the agency itself for historical records on current clients, and ii) accessing historical data held by other agencies on current clients.
- 4. In the fourth step of the process, for people with pre-existing BHI (Step 1), researchers examined whether the generation of new BHI varied by race/ethnicity or sex. The researchers' assumption was that groups that are underrepresented in the data may benefit most from improved access to pre-existing BHI. The analysis used the sample with pre-existing BHI (Step 2) to examine the association between race/ethnicity and follow-up BHI generated during agency contact. Logistic regression models controlled for other factors that may have affected the association: that is, sex, age, and offense. Similar models were used to examine the association between sex and follow-up BHI generated during agency contact.

Additionally, this research examined opportunities to use BHI to promote Medicaid enrollment and Medicaid service uptake among justice-involved people who returned to the community from DOC custody. The analysis used Medicaid data provided by the DHCF. Descriptive statistics were used to assess the extent to which members of the arrest cohort who were released from the DOC during the study period were subsequently enrolled in Medicaid. They also showed the proportion who received behavioral health services after release.

Figure 1.

Four-step analytic strategy



### **Findings**

The findings are presented as follows:

- Analysis of the MPD arrest cohort, including BHI provided by DBH and DHCF.
- > PSA analysis.
- > DOC analysis, including Medicaid enrollment and claims in the DOC release cohort.
- CSOSA analysis.

Supporting data for the analyses presented in this section is available in the Appendix.

# Metropolitan Police Department October 2012 arrest cohort

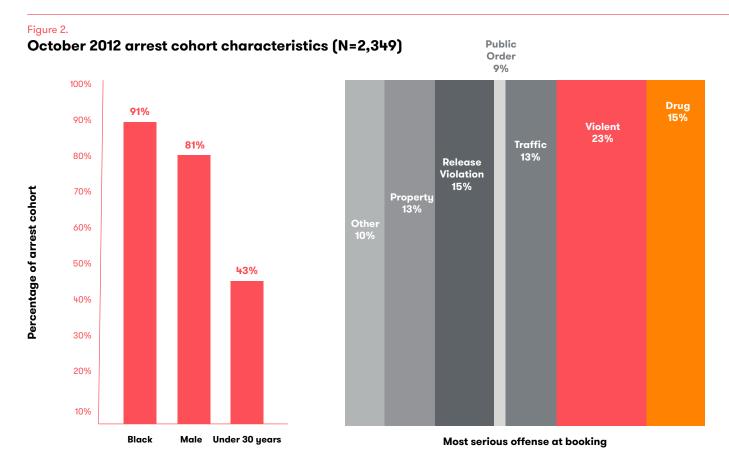
The analyses in this section all pertain to the October 2012 MPD arrest cohort at the time of arrest. First they describe the arrest cohort characteristics and charges. Then they show the extent of BHI held by the health and justice agencies, the distribution of BHI across the justice and health sectors, and the extent of

BHI held by the DBH and the DHCF. The final analysis for the MPD cohort presents sex and race/ethnic group differences in BHI held by the health and justice agencies.

### The October 2012 arrest cohort was mainly male and black, with a substantial component of young adults.

A large majority of people arrested in October 2012 (N=2,349) were identified as black (91 percent) and male (81 percent) (Figure 2). Young adults comprised a substantial portion of the arrest cohort (mean age 35 years), with 43 percent less than 30 years of age. The most prevalent offenses with which the arrest cohort

was charged at booking were violent crimes (23 percent), followed by drug crimes and release violations (both 15 percent). Some people were charged with multiple offenses at booking. However, only the most serious offense was considered in this analysis.



Supporting data in Table A1 in the Appendix. Percentages may not total 100 due to rounding.

This study was unable to assess seasonal effects—that is, similarities and differences between the October 2012 arrest cohort and those arrested in other months during 2012—because that data was not available to the researchers. However, there was a trend toward a declining number of arrestees from 2005 through 2016, with 2012 being the second-lowest year.<sup>22</sup> The total number of arrests in October 2012 (3,162) was 13 percent lower than the monthly mean for the 12-year period (3,646).

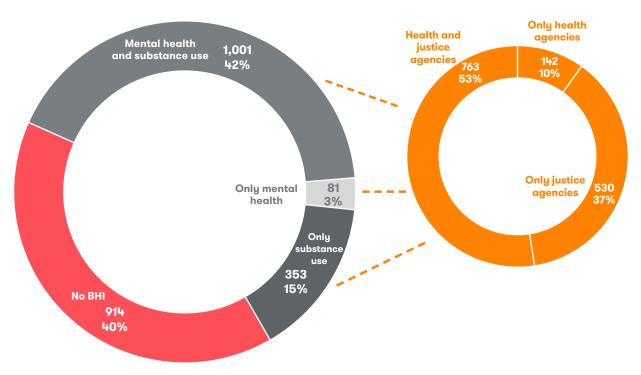
At arrest, the health and justice agencies together held BHI for six in 10 people. Most people with BHI had both mental health and substance use information. More than half the group with BHI had information held by both the health and justice agencies.

The health and justice agencies held BHI for 60 percent of the study cohort at their arrest in October 2012 (n=1,435) (Figure 3, left panel). Among people with BHI, more than twice as many had co-occurring mental health and substance use information (n=1,001) than lone mental health (n=81) and lone substance use (n=353) information combined. This is notable because co-occurring mental health and substance problems are more likely to be chronic and severe, and more difficult and expensive to treat.<sup>23</sup>

Fifty-three percent of people with BHI at the time of arrest had information within both justice and health agencies (n=763) (Figure 3, right panel). This finding suggests there was considerable overlap between people with BHI who were served by the justice and health sectors prior to their arrest. At the same time, there were opportunities to extend the reach of BHI to allow practitioners to make data-driven decisions about diversion and treatment.

Figure 3.

Prevalence, co-occurrence and distribution across health and justice agencies of behavioral health information in the October 2012 arrest cohort, 2006–2012 (N=2,349)

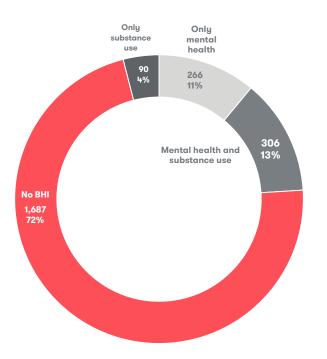


At arrest, the Department of Behavioral Health held BHI for just over one in four people in the arrest cohort, while the Department of Health Care Finance held Medicaid behavioral health claims for about one in eight people.

DBH and DHCF each held BHI for a minority of people at the time of arrest. DBH held information on 28 percent (n=662) of the cohort (Figure 4) and DHCF held Medicaid claims for 13 percent (n=296) of the cohort (Figure 5). It is notable that, together, DBH and DHCF held BHI for 905 people in the arrest cohort (38 percent), suggesting that a majority of people had not interacted with the public mental health system between 2006 and 2012. Further, there was minimal overlap between DBH and DHCF—53 people had BHI held by both agencies.

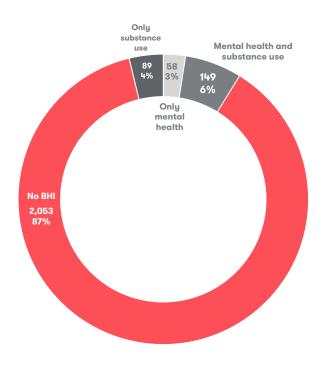
Figure 4.

Prevalence and co-occurrence of pre-arrest behavioral health information from the Department of Behavioral Health: Arrest cohort, 2006–2012 (N=2,349)



#### Figure 5.

Prevalence and co-occurrence of pre-arrest behavioral health claims from the Department of Health Care Finance: Arrest cohort, 2006–2012 (N=2,349)



At arrest, the odds that the health and justice agencies held BHI were five times higher for black people and twice as high for Latinos, compared to white people. The odds were twice as high for men compared to women.

This study examined whether the generation of BHI varied by race/ ethnicity or by sex. (Supporting data for the analysis is available in Figure A1 in the Appendix while the main points are discussed here.)

The researchers used multivariate logistic regression to estimate the association between race/ethnicity and BHI at arrest. The regression accounted for other factors that might influence the association: sex, age, and type of offense. The results indicated that the odds of having pre-arrest BHI were higher for black people (AOR 5.26, p<.001) and Latinos (AOR 1.97, p.028), compared to white people. The regression also indicated that the odds of having pre-arrest BHI were higher for men than women (AOR 1.72, p<.001), after controlling for race/ethnicity, age, and type of offense.<sup>24</sup> The increased likelihood of having BHI for black people, Latinos, and men may be partially explained by their overrepresentation in the criminal justice system—a question for future research.<sup>25</sup>

# Pretrial Services Agency for the District of Columbia

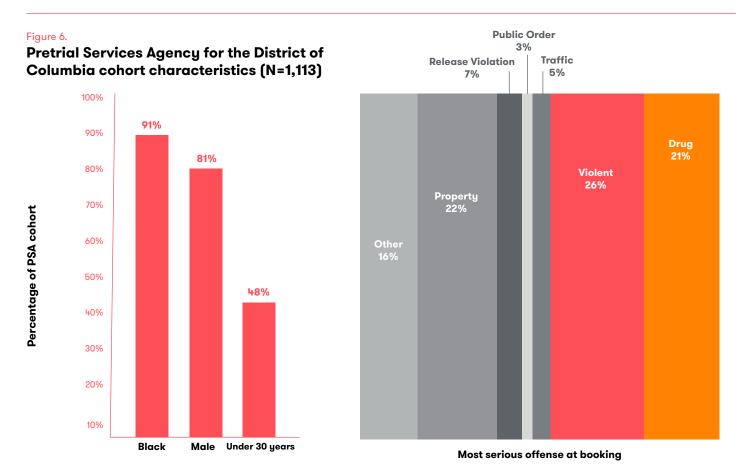
PSA provided data for members of the October 2012 arrest cohort who encountered the agency as a result of that arrest—the PSA cohort. The data pertained to completed mental health and substance use assessments and treatment dates for 2006 through 2014. Mental health and substance use assessments originate with defendant self-reports and observations by PSA or court personnel during the diagnostic process after arrest. They also can be initiated after a person is released to PSA supervision. Treatment placements are made once a person is released to PSA supervision, if appropriate. The data provided by PSA reflects only part of the broader context of PSA's BHI collection and related activities. Therefore, the estimates in this study of the extent to which PSA generated BHI may be conservative. Nonetheless, the current analyses highlight the potential value of BHI held by the justice and health agencies that could possibly be utilized by PSA. The rationale is that greater access to information about clients' behavioral health histories could lead to improved decisions about diversion and treatment.

This section first describes the cohort characteristics. It then presents the results of the four-step analytic strategy described in Figure 1: (1)

the extent of pre-existing BHI held by the health and justice agencies; (2) for people with pre-existing BHI, the extent of BHI generated during contact with PSA; (3) for people with pre-existing BHI but no BHI during contact with PSA, the potential for accessing BHI within PSA's historical records and historical BHI held by other agencies; and (4) for people with pre-existing BHI, differences across sex and race/ethnic groups in the likelihood that PSA generated BHI during agency contact.

## The PSA cohort was mainly male and black, and almost half the cohort was young adults under age 30.

A large majority of people who encountered PSA as the result of their arrest in October 2012 were identified as black (91 percent) and male (81 percent) (Figure 6). Young adults comprised almost half the PSA cohort: 48 percent of people were less than 30 years of age. The most prevalent offenses with which the PSA cohort was charged at booking were violent crimes (26 percent), followed by property (22 percent) and drug crimes (21 percent). Some people



Supporting data in Table A2 in the Appendix. Percentages may not total 100 due to rounding.

were charged with multiple offenses at booking. However, only the most serious offense was considered in this analysis.

The PSA and October 2012 arrest cohorts were similar in terms of sex and race/ethnicity, although the PSA cohort was younger on average (mean age 34 years v. 35 years). However, charges of violent crimes (26 percent v. 15 percent) and drug crimes (21 percent v. 13 percent) were more prevalent in the PSA cohort compared to the arrest cohort. By contrast, public order (3 percent v. 9 percent), traffic (5 percent v. 15 percent), and release violations (7 percent v. 13 percent) were less prevalent.

# On arrival at PSA, 67 percent of the agency cohort had pre-existing BHI. PSA did not generate BHI for three-quarters of those people during their contact with the agency.

Figure 7 shows that the health and justice agencies together held pre-existing BHI for two-thirds of the PSA cohort on arrival (67 percent, n=737). Yet PSA generated BHI during agency contact for a minority of this group (17 percent of the cohort, n=177) while the majority of the group lacked this information (50 percent of the cohort, n=560). Even though PSA generated other BHI that was not part of this study, these limited findings suggest there is considerable potential for PSA to pursue access to pre-existing BHI on people for whom they did not generate follow-up BHI during agency contact.

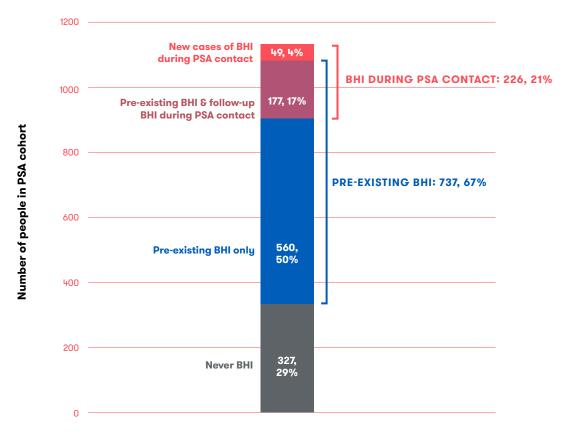
Overall, considering both pre-existing BHI generated by the health and justice agencies as well as BHI generated by PSA during agency contact, Figure 7 indicates that information was available for 71 percent of the PSA cohort over the study period (2006 to 2014). This included 49 new cases (4 percent) who had no pre-existing BHI. Disaggregating overall BHI by mental health and substance use indicates that the majority of people with BHI had co-occurring information (44 percent of the PSA cohort, n=487). Six percent of people had mental health information alone (n=64) and 21 percent had substance use information alone (n=235). This finding is noteworthy, given that co-occurring conditions are more intractable.<sup>27</sup>

#### PSA itself held pre-existing BHI for 15 percent of the group that had preexisting BHI but no follow-up BHI during agency contact. CSOSA held BHI for more than three-quarters of this group.

Although not all people with pre-existing BHI may have needed services at the time they encountered PSA—a person could be in remission, for example—the gap between the number of people with pre-existing BHI and the number in that group for whom PSA generated follow-up BHI during agency contact suggests that the agency could further capitalize on

Figure 7.

Pretrial Services Agency for the District of Columbia cohort: Behavioral health information generated before and during agency contact, 2006–2014 (N=1,113)



historical information to inform decisions about services. Next, the study examined ways to access this information. The analysis focused on the group of 560 people described above—the 50 percent of the PSA cohort who did not have follow-up BHI, shown in the blue section of Figure 7. It addressed the question of where the pre-existing BHI for this group resided—in other words, where PSA could obtain information about these clients' behavioral health histories.

The horizontal bars in Figure 8 indicate the extent to which each agency held BHI for the group of 560 people without follow-up BHI. The bottom bar indicates that PSA held pre-existing BHI for 15 percent of this group (n=86), meaning that PSA had generated BHI for those 86 people during a previous agency contact but did not create new BHI for them during the current contact. This suggests that PSA could consider strengthening internal processes to improve access to its own BHI.

Although PSA lacked pre-existing BHI for 474 people in the group of 560 people without follow-up BHI, it could potentially access historical data about these people from other agencies. For example, the middle bar shows that CSOSA held pre-existing BHI for 77 percent of the group of 560. In a

disaggregation of that 77 percent, the red section of the bar indicates that PSA, along with CSOSA, held BHI for 11 percent (n=63) of the group of 560. The gray section indicates that CSOSA held BHI for a further 66 percent (n=368) of the group. All this information could possibly be useful to PSA and its clients. Similarly, DBH held pre-existing BHI for 43 percent of the group of 560. The disaggregation shows that PSA, along with DBH, held pre-existing BHI for 7 percent of the group (n=36), while DBH held BHI for a further 36 percent (n=208).

These findings suggest that facilitating access to PSA's own historical BHI, along with targeted collaborations with both CSOSA and DBH, could prove fruitful. Moreover, because the nature of BHI varies among agencies and all the other agencies held pre-existing BHI on PSA's clients, multiagency BHI-sharing alliances could provide a wide array of data to inform decisions about PSA's clients.

PSA cohort: Agencies that held pre-existing BHI for people with no follow-up BHI generated during contact with PSA (N=560)



## The odds that PSA generated follow-up BHI during agency contact were about half as great for men as for women.

The final PSA analysis examined whether particular sex and race/ethnic subgroups would benefit more from improved access to pre-existing BHI. (Supporting data for the complete analysis is available in Figure A2 in the Appendix while the main points are discussed here.)

The researchers used multivariate logistic regression to estimate the association between sex and follow-up BHI generated during PSA contact for the October 2012 arrest, in the sample of clients with pre-existing BHI. The regression accounted for other factors that might influence the association: race/ethnicity, age, and type of offense. The results indicated that among PSA clients with pre-existing BHI, the odds that PSA generated follow-up BHI during agency contact were 47 percent lower for men than women (AOR 0.53, p.006).<sup>28</sup> The regression analysis also showed that the odds of having follow-up BHI for PSA clients identified as black or Latino were each lower than for white clients, although the differences were not statistically significant. Overall, these findings suggest that facilitating access to information about clients' behavioral health histories and creating BHI-sharing alliances across agencies may prove particularly beneficial for men.

# District of Columbia Department of Corrections

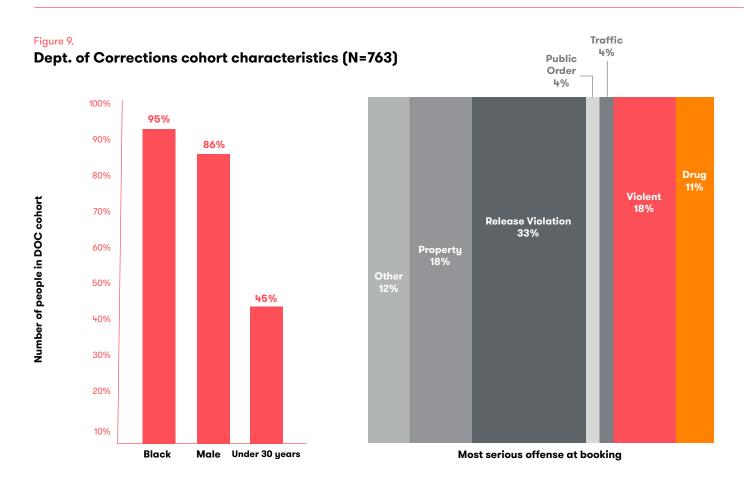
The District of Columbia DOC provided data for members of the October 2012 arrest cohort that encountered the agency as the result of that arrest—a group referred to as the *DOC cohort*. The data included DSM-IV and ICD-9 codes pertaining to behavioral health services provided by DOC for clients with mental health and substance use conditions. The two sets of codes are widely used. They are derived from clinical criteria for diagnosing mental and substance disorders. This implies that the BHI provided by DOC was based on a more robust method of identifying people with behavioral health symptoms, by clinical standards, relative to other justice agencies in this study.

This part of the report first describes the DOC cohort's characteristics. It then presents the results of the four-step analytic strategy illustrated in Figure 1: (1) the extent of pre-existing BHI on the DOC cohort held by the health and justice agencies; (2) for people with pre-existing BHI, the extent of BHI generated during contact with DOC; (3) for people with pre-existing BHI but no BHI during contact with DOC, the potential for accessing BHI within DOC's historical records and historical BHI held by other agencies; and (4) for people with pre-existing BHI, differences across sex and race/ethnic groups in the likelihood that DOC generated BHI during agency contact.

### The DOC cohort was almost exclusively black, with a large majority of men. Almost half the cohort was young adults under age 30.

A large majority of people who encountered DOC due to their arrest in October 2012 were identified as black (95 percent) and male (86 percent) (Figure 9). Young adults comprised almost half the DOC cohort: 45 percent of people were less than 30 years of age. The most prevalent of the offenses with which the DOC cohort was charged at booking were release violations (33 percent), followed by violent crimes and property crimes (both 18 percent). Some people were charged with multiple offenses at booking. However, only the most serious offense was considered in this analysis.

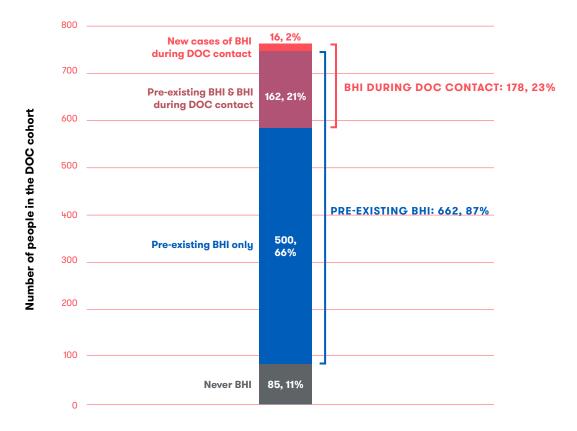
Although the DOC and the October 2012 arrest cohorts were similar in terms of demographic characteristics, the DOC cohort consisted of greater percentages of black people (95 percent v. 91 percent) and men (86 percent v. 81 percent). It was also younger, on average (mean age 34 years v. 35 years). Charges of release violations (33 percent v. 13 percent) were more prevalent in the DOC cohort compared to the arrest cohort, while property (18 percent v. 23 percent), public order (4 percent v. 9 percent), and traffic offenses (4 percent v. 15 percent) were less prevalent.



Supporting data in Table A3 in the Appendix. Percentages may not total 100 due to rounding.

Figure 10.

Dept. of Corrections cohort: Behavioral health information generated before and during agency contact, 2006-2014 (N=763)



# On arrival at DOC, almost nine in 10 people had pre-existing BHI. DOC did not generate BHI for 75 percent of this group during their contact with the agency.

Figure 10 shows that, together, the health and justice agencies held pre-existing BHI for a large majority of the DOC cohort on arrival (87 percent, n=662). Yet DOC generated BHI during agency contact for a minority of this group (21 percent of the cohort, n=162), while a majority of the group lacked this information (66 percent of the cohort, n=500). This finding may be partially explained by the fact that DOC only provided BHI for people who met clinical criteria for a behavioral health disorder. At the same time, it is likely that at least some portion of this group could have benefited from services and, in any case, that DOC could have used the additional data about this group to inform decisions about treatment.

Overall, considering both pre-existing BHI generated by the health and justice agencies and BHI generated during PSA contact, Figure 10 indicates that information was available for 89 percent of the DOC cohort over the study period (2006 to 2014). This includes 16 new cases (2 percent) who had no pre-existing BHI. Disaggregating overall BHI by mental health and substance

use indicates that the majority of people with BHI had co-occurring information (59 percent of the DOC cohort, n=451). Five percent of people had mental health information alone (n=38) and 25 percent had substance use information alone (n=189). The relatively high proportion of co-occurring problems is important, given that co-occurring conditions are more difficult to treat.<sup>29</sup>

#### DOC itself held pre-existing BHI for one third of the group with no followup BHI. CSOSA held BHI for almost nine in 10 people in this group.

It is likely that not all people from the arrest cohort who came to the DOC with pre-existing BHI needed services. For example, some conditions may be cured or in remission. Other conditions, such as substance use, may be underreported. Further, people view behavioral illness as a vulnerability in a jail environment and may be hesitant to seek treatment. Still other diagnoses may be expeditious, such as those necessary to obtain over-the-counter medication. However, improved access to the wide range of historical BHI previously generated by the health and justice agencies could have provided more data to DOC to inform decisions about services and diversion for these clients. The next part of the analysis explored pathways to making this information available. It focused on the group of 500 people described above—the 66 percent of the DOC cohort who did not have follow-up BHI, represented in the blue section of the bar in Figure 10. The analysis addressed the question of where DOC could access data concerning these clients' behavioral health histories.

The horizontal bars in Figure 11 indicate the extent to which each agency held BHI for the group of 500. The blue and gray sections show two avenues for accessing available BHI. The gray sections display the percentage of BHI held by both DOC itself and the other agencies. The second bar from the bottom indicates that DOC itself held pre-existing BHI for 34 percent of the group of 500 (n=172). Again, if the client does not present with the symptoms—because, for example, the condition is episodic or the person chooses not to disclose them—the clinician may not diagnose or treat the client, even if they review the client's record. However, the findings suggest that DOC could consider further leveraging existing information on its clients' behavioral health histories.

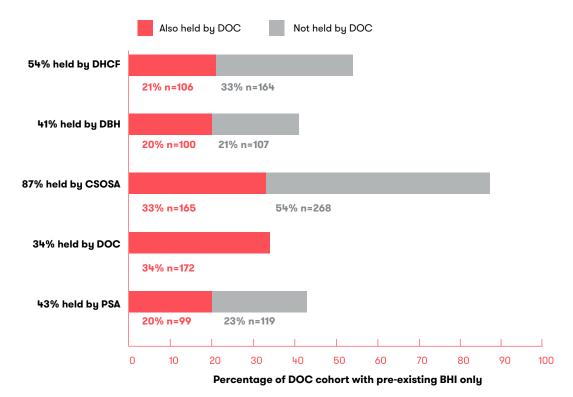
Additionally, although DOC lacked pre-existing BHI for 328 people (66 percent) in the group of 500, it could potentially access data about these people from other agencies. For example, the middle bar shows that CSO-SA held pre-existing BHI for 87 percent of the group of 500. In a disaggregation of that 87 percent, the red section of the bar indicates that DOC, along with CSOSA, held BHI for 33 percent (n=165) of the group of 500.

Moreover, the gray section indicates that CSOSA held BHI for a further 54 percent (n=268) of the group, information that could be useful to DOC and its clients. Similarly, DHCF (top bar) held pre-existing BHI for 54 percent of the group of 500. The disaggregation shows that DOC along with DHCF held pre-existing BHI for 21 percent of the group (n=106), while DHCF held BHI for a further 33 percent (n=164). Therefore, accessing information from CSOSA and DHCF could potentially help DOC in making decisions about its clients. Interestingly, DOC has established information sharing through a memorandum of understanding with DBH; however, barriers associated with federal regulations have thus far prevented similar agreements with CSOSA and PSA.

Together, the findings suggest that facilitating access to DOC's own historical BHI, along with targeted collaborations with both CSOSA and DHCF, could be productive. Moreover, because each of the agencies held pre-existing BHI on a sizable portion of DOC's clients, establishing data linkages among multiple agencies could provide a wide array of data to inform decisions.

Figure 11.

DOC cohort: Agencies that held pre-existing BHI for people with no follow-up BHI generated during contact with DOC (N=500)



## The odds that DOC generated follow-up BHI during agency contact were one-third lower for men compared to women.

This research also examined whether particular race/ethnicities or sexes could benefit more from improving access to pre-existing BHI. (Supporting data for the complete analysis is available in Figure A2 in the Appendix. The main points are discussed here.)

The researchers used multivariate logistic regression to estimate the association between sex and follow-up BHI generated during DOC contact resulting from the October 2012 arrest for clients with pre-existing BHI. The regression accounted for other factors that might influence the association: race/ethnicity, age, and type of offense. The results indicated that among DOC clients with pre-existing BHI, the odds that DOC generated BHI during agency contact were 34 percent lower for men than women (AOR 0.66, *p*.095).<sup>30</sup> The regression analysis did not reveal any statistically significant race/ethnic group differences after controlling for sex, age, and type of offense. In conclusion, these findings suggest that facilitating access to information about clients' behavioral health histories and creating BHI-sharing alliances across agencies may accrue benefits to men in particular.

### Over half the people released from DOC were enrolled in Medicaid upon or after release. One in five had Medicaid claims.

This study examined the extent of Medicaid enrollment and claims among the members of DOC cohort who were released during the study period. This group is referred to as the DOC release cohort (N=731). This sample was specified for the post-release Medicaid analysis because data was available concerning their incarceration, subsequent release, and post-release Medicaid activity—the sequence of events needed to assess the extent to which justice-involved people access public health services after they return to the community. The analysis was restricted to people who were released at least 90 days prior to the end of the study period. This strategy allowed a minimum three-month post-release period during which to assess enrollment in Medicaid and Medicaid claims.

While over half the DOC release cohort was enrolled in Medicaid upon or after release (57 percent, n=419), a much smaller proportion had Medicaid claims related to mental health or substance use within the post-release period (20 percent, n=146). Mental health claims (16 percent, n=118) were more prevalent than substance use claims (10 percent, n=75).

Notably, eight in 10 people who were not enrolled had BHI held by the health or justice agencies at release. If their historical BHI were accessible, it could potentially have been used to target this group for Medicaid enrollment, under the assumption that they were more likely to need behavioral health services after release. Income data was not available, so means testing for Medicaid eligibility could not be included in the analysis. Therefore, the results presented here may be liberal estimates of the percentage of the release cohort who could be targeted for Medicaid enrollment.

After the Affordable Care Act was passed, beginning in 2014, and after the Centers for Medicaid and Medicare Services guidance was issued in 2016, all eligible people had an opportunity to enroll in Medicaid upon release. DHCF provides coverage retroactive to the first day of the month of release. However, validation and enrollment can only be done by the Department of Human Services staff, and it requires identification that is not always available at release. The District is exploring whether the inmate ID could be used for this purpose, similarly to other jurisdictions, such as Cook County, Illinois. Initiatives such as this one could take advantage of empirical findings like those in this study to prioritize groups at higher risk of needing behavioral health services.

#### Court Services and Offender Supervision Agency for the District of Columbia

The CSOSA analyses drew on a broad range of nonclinical behavioral health-related data for members of the October 2012 arrest cohort who encountered the agency in connection with that arrest. The BHI provided by CSOSA included judges' special conditions for behavioral health supervision, assessment, and treatment; community supervision officers' referrals for services; and assignments to supervision staff whose specialized role is behavioral health.

The CSOSA analysis first describes the cohort characteristics. It then presents the results of the four-step analytic strategy illustrated in Figure 1: (1) the extent of pre-existing BHI held by the health and justice agencies; (2) for people with pre-existing BHI, the extent of BHI generated during contact with CSOSA; (3) for people with pre-existing BHI but no BHI during contact with CSOSA, the potential for accessing BHI within CSOSA's historical records and historical BHI held by other agencies; and (4) for people with pre-existing BHI, differences across sex and race/ethnicity in the likelihood that CSOSA generated BHI during agency contact.

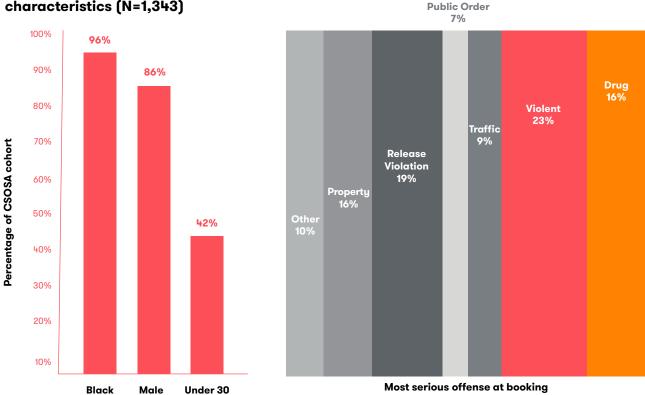
### The CSOSA cohort consisted almost exclusively of black people, with a large majority of men. Almost half the cohort was young adults under age 30.

The large majority of people who encountered CSOSA for their October 2012 arrest were identified as black (96 percent) and male (86 percent) (see Figure 12). Young adults comprised almost half the CSOSA cohort: 42 percent were less than 30 years of age. The most prevalent offenses with which the CSOSA cohort was charged at booking were violent crimes (23 percent), followed by release violations (19 percent). Some people were charged with multiple offenses at booking; however, only the most serious offense was considered in this analysis.

Although the CSOSA and the October 2012 arrest cohorts had similar demographic characteristics, the CSOSA cohort was comprised of greater percentages of black people (96 percent v. 91 percent) and men (86 percent v. 81 percent). Charges for violent crimes (23 percent v. 15 percent) and release violations (19 percent v. 13 percent) were more prevalent, while property crimes (16 percent v. 23 percent) and traffic offenses (9 percent v. 15 percent) were less prevalent in the CSOSA cohort compared to the arrest cohort.

Figure 12.

Court Services and Offender Supervision Agency cohort characteristics (N=1,343)



Supporting data in Table A4 in the Appendix. Percentages may not total 100 due to rounding.

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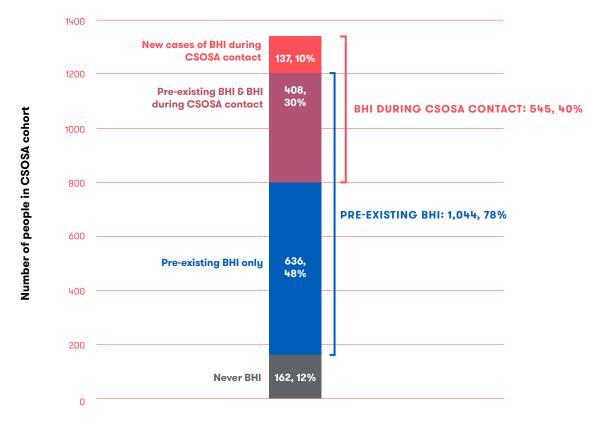
# Upon arrival at CSOSA, nearly eight in 10 people had pre-existing BHI. CSOSA did not generate BHI for more than one-third of that group during contact with the agency.

Figure 13 shows that, together, the health and justice agencies held pre-existing BHI for over three-quarters of the CSOSA cohort on arrival (78 percent, n=1,044). Yet CSOSA generated BHI during agency contact for a minority of this group (30 percent of the cohort, n=408) while the majority of the group lacked this information (48 percent of the cohort, n=636). These findings suggest that making behavioral health histories more accessible could benefit CSOSA and its clients.

Overall, considering both pre-existing BHI generated by the health and justice agencies as well as BHI generated during CSOSA contact, Figure 13 indicates that information was available for 88 percent of the CSOSA cohort over the study period (2006 to 2014). This includes 137 new cases (10 percent) who had no pre-existing BHI. Disaggregating overall BHI by mental health and substance use indicates that the majority of people with BHI had co-occurring information (55 percent of the CSOSA cohort, n=731). Four percent of people had mental health information alone (n=58) and 29 percent had substance use information alone (n=392). The rel-

Figure 13.

Court Services and Offender Supervision Agency cohort: Behavioral health information generated before and during agency contact, 2006–2014 (N=1,343)



atively high proportion of co-occurring BHI is notable given that co-occurring conditions are more difficult to treat.<sup>32</sup>

### CSOSA itself held pre-existing BHI for 85 percent of the group that had no follow-up BHI. DBH held BHI for half this group.

The researchers' assumption was that, while it is likely that not all CSOSA's clients who had no follow-up BHI had current behavioral health conditions, at least some portion could have benefited from services. In any case, if wideranging BHI were readily available to CSOSA, the agency could potentially have used it to make data-informed decisions about diversion and treatment. The next part of the study explored pathways to making this information available. It focused on the group of 636 people described above—the 48 percent of the CSOSA cohort who did not have follow-up BHI, represented in the blue section of the bar in Figure 13. The analysis addressed the question of where CSOSA could access data concerning these clients' behavioral health histories.

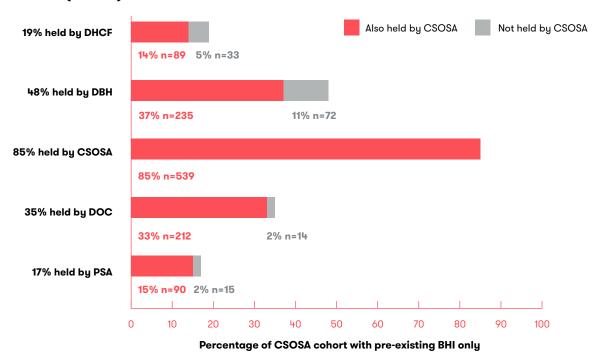
The horizontal bars in Figure 14 indicate the extent to which each agency held BHI for the group of 636 people. The red and gray sections show two avenues for accessing available BHI. The gray sections display the percentage of BHI held by both CSOSA itself and the other agencies. The middle bar indicates that CSOSA itself held pre-existing BHI for 85 percent of the group of 636 (n=539). This finding suggests that CSOSA could strengthen internal processes to take advantage of in-house historical information on its clients' behavioral health.

Additionally, although CSOSA lacked pre-existing BHI for 97 people (15 percent) in the group of 636, it could potentially access data about these people from other agencies. For example, the second bar shows that DBH held pre-existing BHI for 48 percent of the group of 636. In a disaggregation of that 48 percent, the red section of the bar indicates that CSOSA, along with DBH, held BHI for 37 percent (n=235) of the group of 636. Moreover, the gray section indicates that DBH also held BHI for a further 11 percent (n=72) of the group, information that could inform decisions about CSOSA's clients.

Together, the findings suggest that facilitating access to CSOSA's own historical BHI, along with a targeted data-sharing alliance with DBH, could be beneficial. Again, because each of the agencies held pre-existing BHI on CSOSA's clients, establishing data linkages among multiple agencies could provide a wide array of data to inform decisions.

Figure 14.

CSOSA cohort: Agencies that held pre-existing BHI for people with no BHI generated during contact with CSOSA (N=636)



## The odds that CSOSA generated follow-up BHI during agency contact were half as high for men as for women.

The last part of the CSOSA analysis examined the issue of whether particular race/ethnicities or sexes would benefit from expanded access to pre-existing BHI. (Supporting data for the complete analysis is available in Figure A<sub>3</sub> in the Appendix, while the main points are discussed here.)

The researchers used multivariate logistic regression to estimate the association between sex and BHI generated during CSOSA contact for the October 2012 arrest, for clients with pre-existing BHI. The regression accounted for other factors that might influence the association: race/ethnicity, age, and type of offense. The results indicated that among CSOSA clients with pre-existing BHI, the odds that DOC generated BHI during agency contact were 53 percent lower for men than women (AOR 0.47, p<.001).<sup>33</sup> Overall, these findings suggest that men may especially benefit from improving access to information about clients' behavioral health histories and creating BHI-sharing alliances across agencies.

The regression analysis also showed that the odds of follow-up BHI were substantially higher for Latino people than white people, after accounting for the influence of sex, age, and type of offense (AOR 5.44, *p.*035). Further research is needed to explain this finding.

#### Discussion

y merging, harmonizing, and analyzing administrative data from six government agencies, this study augments and supports ongoing initiatives in the District of Columbia to make information accessible across the justice and health sectors. This research offers empirical evidence showing that BHI was widely held throughout the D.C. justice and health systems. At arrest, the health and justice agencies held BHI for a majority of the October 2012 arrest cohort (60 percent). The health and justice agencies generated BHI for almost nine in 10 people who encountered either DOC or CSOSA during the nine-year study period (2006 to 2014) and almost three-quarters of the PSA cohort. The majority of people with BHI had information on both mental health and substance use, which suggests that their potential conditions may be more chronic, severe, and intractable.<sup>34</sup>

The analyses also indicated that BHI was relatively siloed. The study therefore identified several opportunities for sharing BHI between and within agencies. This was approached with the assumption that if the agencies had wider access to the behavioral health histories of their clients, staff could make more data-driven decisions about diversion, early intervention, and continuity of care that could, in turn, help improve behavioral health outcomes. In the case of DOC, for example, 662 people from the October 2012 arrest cohort came to the agency with pre-existing BHI from the health and justice agencies. It is likely that not all people with pre-existing BHI had a current need for services. The episodic nature of some illnesses (some people may be cured or in remission) along with variation over time in the severity of conditions means that a client may not present with symptoms that result in a diagnosis or referral for treatment. Additionally, some conditions, such as substance use, are known to be substantially underreported. All this adds up to a set of challenging circumstances for providers and staff in the justice system, who may not have information on the behavioral health status and history of the people with whom they work daily. However, the finding that DOC generated follow-up BHI (during agency contact for that arrest) for 162 of 662 people with pre-existing BHI suggests that some of these challenges could be addressed by strengthening the utility of the historical data that already exists in the health and justice systems.

The empirical evidence in this study suggests three avenues for expanding access to BHI within and across justice and health agencies. First, justice agencies can look at historical records within their own agencies to access BHI they have previously collected and determine its relevance for current service needs. Each of the justice agencies held pre-existing BHI for a substantial portion of people for whom they did not generate follow-up BHI: 15 percent of the PSA cohort, 34 percent of the DOC cohort, and 85 percent of the CSOSA cohort. Therefore, creating and expanding access to historical BHI within agencies could prove beneficial.

Second, justice agencies could benefit further by creating targeted data-sharing alliances that capitalize on collecting data from agencies that are most likely have to have additional information on their clients. For instance, compared to the other agencies, CSOSA held historical BHI for the greatest proportion of people in every agency cohort. It held pre-existing BHI for about nine in 10 people for whom DOC did not generate follow-up BHI and more than three-quarters of people for whom PSA did not generate follow-up BHI. If each of the justice agencies were to develop data-sharing agreements with CSOSA alone, they would have access to more information than they generate on their own. Specific data-sharing agreements with D.C. health agencies would also yield results. PSA and CSOSA could benefit in particular from accessing information from DBH, which held pre-existing BHI for 43 percent and 48 percent, respectively, of their cohorts for whom they did not generate follow-up BHI. Meanwhile, DOC could benefit from further information sharing with DHCF, since it held BHI for more than half its cohort without follow-up BHI (54 percent).

Third, an extension of the approach above advocates for the development of broad data-sharing networks across all justice and health agencies in the District. Together, the agencies hold a diverse portfolio of information. This observation implies that networks of BHI-sharing agencies could offer comprehensive information resulting in potentially more nuanced decisions about diversion and treatment.

Finally, the analyses showed that the odds of having follow-up BHI varied by sex and race/ethnicity. Among those people with pre-existing BHI, the agencies were less likely to generate follow-up BHI for men than for women. This finding aligns with evidence from general population studies that finds that men are less likely to access services, possibly because societal norms may imply that men should "man up" rather than address their health problems.<sup>35</sup> Improving access to available BHI could lead to better-informed decisions about diversion and treatment for men in particular.

It is important to acknowledge again that even though the global measure of BHI used in this study was drawn in part from clinical measures of behavioral health based on DSM-IV and ICD-9 codes, it does not provide an estimate of the prevalence of mental health or substance use disorders. That endeavor would require the assessment of a representative sample of justice-involved people using valid and reliable instruments. The BHI indicator constructed in this study is, however, appropriate to the research objective of exploring opportunities for sharing BHI to inform health and justice decisions about potential behavioral health needs.

It is also important to acknowledge the challenges to sharing BHI. This data is highly sensitive. As well as violating federal laws, the consequences of failing to protect the privacy of people with potential behavioral health conditions include stigma and labeling. In turn, these factors can affect people's legal rights, experiences in prison and jail, family relationships, educational opportunities, and employment, among other areas. Federal privacy laws and the D.C. code, which are designed to protect a person's right to confidential health information, cannot be overruled with a data-sharing agreement. The 2015 D.C. Criminal Justice Coordinating Council report provided a comprehensive discussion of these barriers to sharing data. It proposed a partial solution that involves creating a set of real-time behavioral health metrics that is secure and concise and that travels with the person throughout the justice system.<sup>36</sup> A review is needed to determine how much progress has been made and what challenges remain to resolve the tension between ensuring confidentiality and the need to know.

The final section of this report outlines key ways in which the study findings are actionable. It concludes with suggestions for future research that would build on the current study.

# Implications for action and research

The study provides empirical evidence to undergird a range of behavioral health-related initiatives, many of which have already been initiated by the District's health and justice systems. The findings offer empirical support for:

> legislation that is currently under discussion that would require D.C. agencies to share information for legitimate government purposes related to carrying out the mission of the agency, evaluating the effectiveness of the agency's work, and improving services;

- initiatives that target potentially high-risk groups for Medicaid enrollment;
- > improvements to internal data tracking;
- > BHI-sharing partnerships across agencies and sectors; and
- > investments in necessary upgrades to data systems and infrastructure.

Vera's analysis also supports outreach to other possible data-sharing partners across the health and justice sectors. For example, the findings imply that the Bureau of Prisons could benefit from BHI-sharing initiatives with the health and justice agencies in this study. Similarly, D.C.'s community treatment network could use shared BHI to plan for the needs of justice-involved people.

Lastly, the findings in this study provide evidence that could be used in outreach beyond the health and justice sectors. People with behavioral health needs frequently encounter the criminal justice system as the result of health-related social and economic difficulties. These include unemployment, homelessness, food insecurity, and poor health.<sup>37</sup> For people with behavioral health conditions who are also justice-involved, comprehensive and integrated support from the health, housing, employment, and other social-service sectors is often essential. This study offers a framework for sharing BHI across multiple agencies, which such interventions require.

The study data is rich and extensive, and the methodology and findings laid the groundwork for extensions to this research. Some key examples are highlighted here. Future studies could:

- > support an initiative currently under way to identify people who are frequently involved with the justice and health systems;
- use Medicaid claims data to estimate potential costs and savings associated with sharing BHI;
- > stratify the analysis by the severity (serious, moderate, mild) and course (onset, remission, cure) of potential behavioral health conditions to guide more effective data-sharing initiatives;
- estimate the service capacity required of community providers to respond adequately to the full range of behavioral health needs of people returning to their communities; and

> enhance the current analytic framework by adding measures of the extent of previous criminal history and measures of offending history types that are more representative of the full context of past offending than the qualifying arrest event that defined inclusion in the cohort.

The many challenges faced by people with behavioral health needs include a downward spiral of incarceration, treatment, relapse or decompensation, and reincarceration, frequently for minor offenses that present no danger to public safety. The findings in this study suggest that strengthening internal agency processes around the retrieval of available BHI, as well as creating strategic alliances and networks for sharing BHI across agencies, could provide a wide array of data to inform vital decisions. These decisions might keep people who would be better served through treatment in the community out of jail and prison, as well as lead to improved continuity of care within the justice system. In sum, making data that has already been generated more accessible has the potential to help relieve these burdens, costs, and suffering.

Appendix A

Table A1. MPD October 2012 arrest cohort characteristics

Characteristics	All adults arrested in Oct 2012 (n=2,837)		Study cohort (n=2,349)		Excluded from cohort (n=488)	
	%	n	%	n	%	n
Male	81	2,294	81	1,897	81	397
Race/ethnicity	-	-	-	-	-	-
Black	86	2,441	91	2,131	64	310
White	8	225	5	117	22	108
Latino	5	138	4	91	10	47
Asian	0.7	20	0.2	5	3	15
Other	0.5	13	0.2	5	2	8
Age groups						
17 and under	0.1	2	-	-	0.4	2
18-20	12	342	12	291	10	51
21-24	17	469	17	389	16	80
25-29	16	456	14	339	24	117
30-39	21	600	21	498	21	102
40-49	18	510	18	432	16	78
50 and older	16	458	17	400	12	58
Missing	-	-	-	-	-	-
Residency						
DC	43	1,217	52	1,216	0.2	1
Non-DC	17	486	-	-	99.6	486
Unknown	40	1,134	48	1,133	0.2	1
Most serious offense at booking						
Drug	15	432	15	363	14	69
Violent	22	633	23	551	17	82
Traffic	16	461	13	301	33	160
Public Order	9	264	9	218	9	46
Release Violation/Fugitive	14	402	15	361	8	41
Property	13	357	13	314	9	43
Other Misdemeanors	4	101	3	79	5	22
Weapons	3	94	3	82	2	12
Other Felonies	3	93	3	80	3	13

## **Appendix A**

Table A2. PSA and arrest cohort characteristics

		PSA Cohort n=1,113		Cohort 349
	percent	n	percent	n
Male	83	919	81	1,897
Race/ethnicity				
Black	92	1,022	91	2,131
Latino	4	41	5	117
White	4	48	4	91
Asian	0	2	0	5
Other	0	0	0	5
Age groups				
18-20	16	175	12	291
21-24	17	189	17	389
25-29	15	170	14	339
30-39	20	219	21	498
40-49	16	185	18	432
50 and older	16	175	17	400
Most serious offense at booking				
Violent	26	289	15	363
Property	22	249	23	551
Drugs	21	238	13	301
Public Order	3	33	9	218
Traffic	5	60	15	361
Release Violations/Fugitive	7	83	13	314
Other Misdemeanors	4	41	3	79
Other Felonies	5	56	3	82
Weapon	6	64	3	80

## **Appendix A**

Table A3. DOC and arrest cohort characteristics

		DOC Cohort n=763		Arrest Cohort n=2,349	
	percent	n	percent	n	
Male	86	656	81	1,897	
Race/ethnicity					
Black	95	721	91	2,131	
Latino	3	23	5	117	
White	2	18	4	91	
Asian	0	1	0	5	
Other			0	5	
Age groups					
18-20	13	101	12	291	
21-24	17	127	17	389	
25-29	15	114	14	339	
30-39	22	171	21	498	
40-49	18	136	18	432	
50 and older	15	114	17	400	
Most serious offense at booking					
Violent	18	136	15	363	
Property	18	139	23	551	
Drugs	11	83	13	301	
Public order	4	27	9	218	
Traffic	4	27	15	361	
Release Violations/Fugitive	33	251	13	314	
Other Misdemeanors	2	14	3	79	
Other Felonies	5	39	3	82	
Weapon	6	47	3	80	

Appendix A

Table A4. CSOSA and arrest cohort characteristics

		CSOSA Cohort n=1,343		Cohort 349
	percent	n	percent	n
Male	86	1,161	81	1,897
Race/ethnicity				
Black	96	1,288	91	2,131
Latino	2	24	5	117
White	2	30	4	91
Asian	0	1	0	5
Other	0	0	0	5
Age groups				
18-20	14	182	12	291
21-24	15	204	17	389
25-29	13	175	14	339
30-39	21	288	21	498
40-49	20	262	18	432
50 and older	17	232	17	400
Most serious offense at booking				
Violent	23	306	15	363
Property	16	216	23	551
Drugs	16	209	13	301
Public Order	7	101	9	218
Traffic	9	119	15	361
Release Violations/Fugitive	19	257	13	314
Other Misdemeanors	3	35	3	79
Other Felonies	3	45	3	82
Weapon	4	55	3	80

### Appendix A.

Figure A1.

### MPD arrest cohort: Race/ethnicity and sex differences in pre-arrest BHI

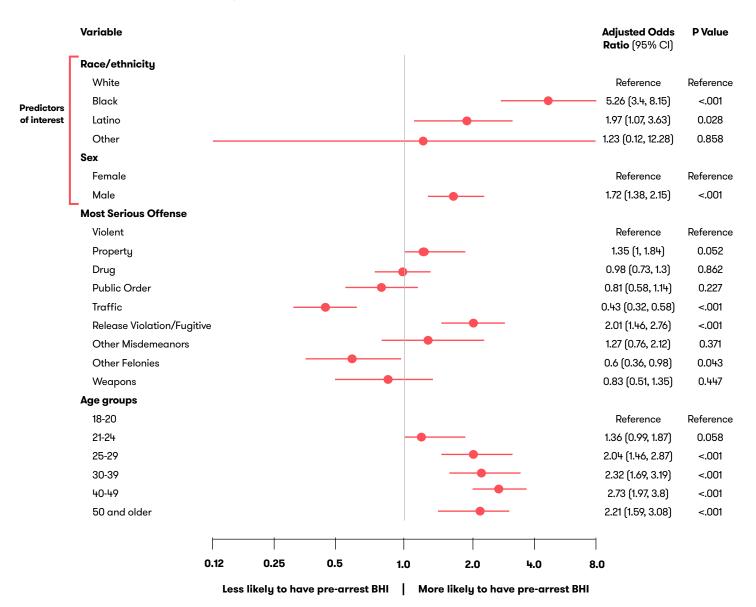


Figure A2.

PSA cohort: Race/ethnicity and sex differences in follow-up BHI

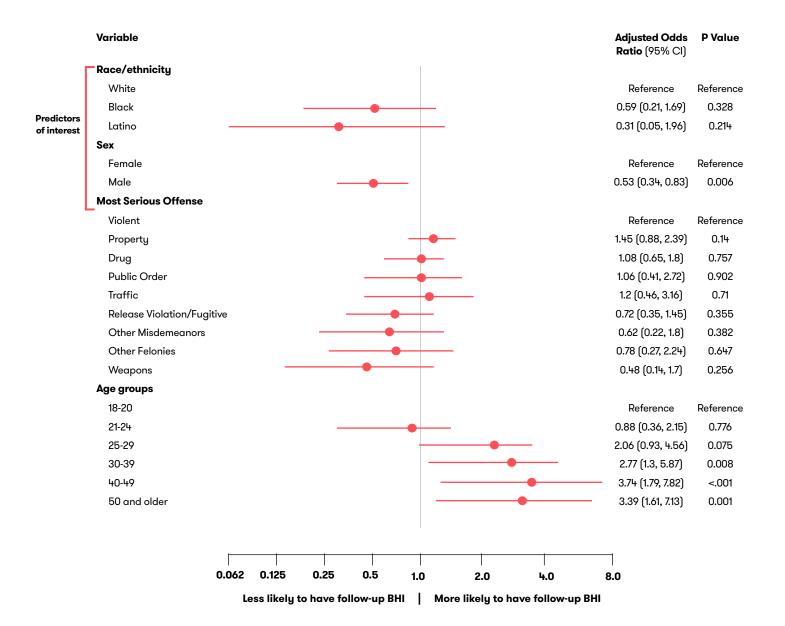


Figure A3.

DOC cohort: Race/ethnicity and sex differences in follow-up BHI

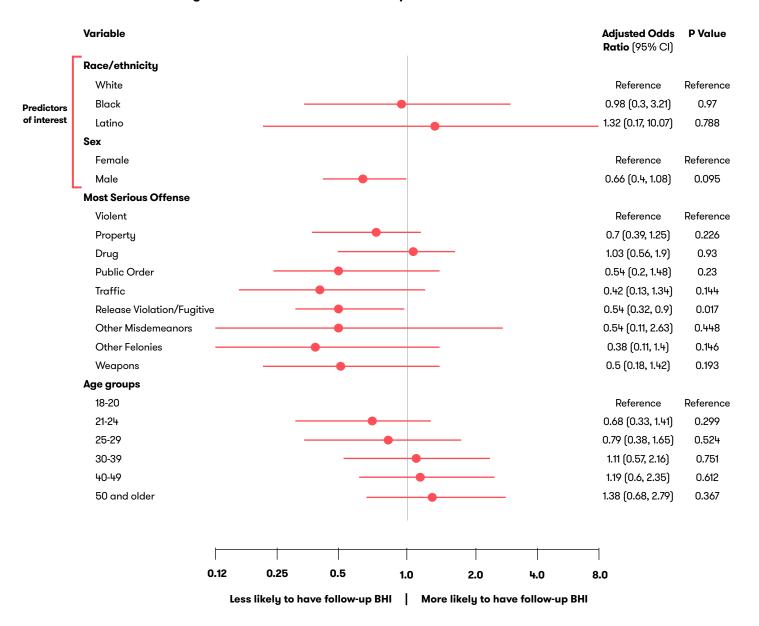
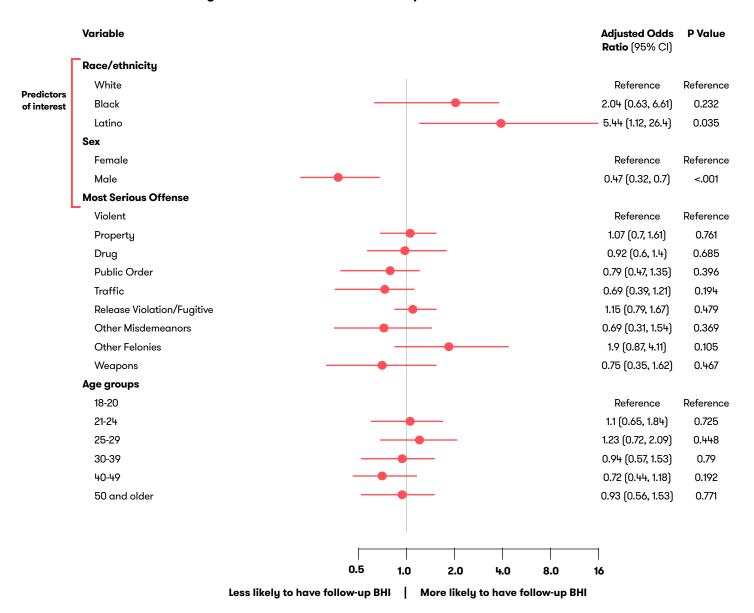


Figure A4.

CSOSA cohort: Race/ethnicity and sex differences in follow-up BHI



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- 25 Marilyn Sinkewicz, Yu-Fen Chiu, and Leah Pope, Exploring Recommitment in the District of Columbia's 2015 Department of Corrections Release Cohort (New York: Vera Institute of Justice, 2018), available on request from the authors.
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- 28 AOR: adjusted odds ratios from logistic regression models that controlled for sex or race, age, and offense. Statistically significant results reported at p<.10, meaning the probability is less than one in 10 that the difference occurred by chance.
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