



Closing the Gap

Using Criminal Justice and Public Health Data to Improve the Identification of Mental Illness

JULY 2012



Executive Summary

This report describes findings from the Vera Institute of Justice's District of Columbia Forensic Health Project—a study of the mental health needs of people arrested in the District of Columbia designed to fill a gap in the available information on this high-need and underserved population. The project was developed by Vera's Substance Use and Mental Health Program (SUMH) to provide criminal justice and health agencies with information to improve the delivery of mental health services to people involved in the criminal justice system in the District of Columbia (referred to as "DC" throughout this report).

The identification and treatment of people with mental health needs who are involved with the criminal justice system is an ongoing priority in DC, as demonstrated by the establishment of the Criminal Justice Coordinating Council's Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT) in 2006. The findings of this study support the strategic recommendations of the task force and the work of individual health and justice agencies by providing the most comprehensive quantitative assessment to date of the mental health needs of people arrested in DC.

The study uses administrative data supplied by five government agencies to track criminal justice system involvement and markers of psychiatric need for a cohort of 2,874 people arrested by the Metropolitan Police Department of the District of Columbia (MPD) during June 2008. In addition to the arrest data provided by MPD, the Court Services and Offender Supervision Agency for the District of Columbia (CSOSA), the District of Columbia Department of Corrections (DOC), the District of Columbia Department of Mental Health (DMH) and the Pretrial Services Agency for the District of Columbia (PSA) provided client-specific data describing contacts with members of the study cohort between 2006 and 2011. This is the first time that records from these agencies have been combined into an aggregate dataset.

Vera researchers calculated rates of mental illness based on the indicators of psychiatric need provided by each of the agencies (for example, formal diagnosis, or contact with specialized mental health supervision teams) for the study cohort. They sought to answer two basic questions:

- > Which people arrested in DC have mental health needs?
- > When this population comes into contact with local and relevant federal criminal justice agencies, do these agencies recognize their mental health needs?²

The research had three goals: to inform ongoing initiatives in DC seeking to improve access to treatment services; to support the design of new policies and programs; and to provide a baseline against which to measure the effectiveness of new initiatives.

The key study findings include:

- > About 33 percent of adult DC residents arrested during June 2008 had some indication of mental health need in partner agency records between 2006 and 2011.
- > Many of those arrested with mental health needs were not known to community mental health care providers. Most of the cohort members who had mental health needs (83 percent) were known to at least one criminal justice agency as having such a need between 2006 and 2011. Yet the Department of Mental Health knew about only 59 percent of the cohort members who had mental health needs during that same period.

- > Criminal justice agencies often failed to identify the mental health needs of the people that they encountered. Six hundred sixty-six cohort members with mental health needs came into contact with probation, pretrial services, or the jail as a result of the June 2008 arrest; however, almost half (46 percent) of this group was not identified as having a mental health need by any of the agencies during those contacts.
- > Thirty-three percent of the cohort members known to the Department of Mental Health as having a psychotic spectrum disorder or bipolar disorder were not identified by any of the criminal justice agencies; rates of identification of mental health need by the criminal justice agencies were even lower for people with other diagnoses, such as depression and anxiety disorders.

The report concludes with a series of recommendations aimed at increasing rates of identification of mental health problems by DMH and criminal justice agencies in DC. Building on related initiatives in DC and the findings of this research, the recommendations fall into two main categories:

RECOMMENDATION 1: CAPITALIZE ON OPPORTUNITIES TO IDENTIFY THOSE WHO ARE INVOLVED IN THE DC CRIMINAL JUSTICE SYSTEM AND MAY BENEFIT FROM MENTAL HEALTH SERVICES BY:

- a) making the most of opportunities for early identification;
- b) improving and leveraging agencies' internal data systems;
- c) developing performance measures to describe and monitor rates of identification and service provision;
- d) increasing interagency communication; and
- e) targeting high-need groups.

RECOMMENDATION 2: ENSURE CONTINUITY OF TREATMENT FOR PEOPLE WITH MENTAL HEALTH NEEDS AS THEY MOVE BETWEEN SETTINGS BY:

- a) initiating targeted information-sharing initiatives between criminal justice agencies and DMH; and,
- b) expanding strategies for engaging underserved groups and linking clients with service providers in the community, such as jail in-reach programs.

While this report focuses on data from agencies in DC, issues related to the identification of people with mental illness and coordination between health and justice agencies are widespread. The recommendations in this report address challenges that arise in many jurisdictions throughout the United States. Moreover, the methods used in this study may provide a template for conducting similar projects in other jurisdictions seeking to improve services for the large numbers of people with mental health needs who come into contact with the criminal justice system.

¹ MPD is responsible for providing policing services in the District of Columbia; CSOSA manages probation, parole, and supervised release for DC Code offenders; DOC is responsible for operating the DC jail system; DMH oversees the provision of mental health services to residents of DC who are seriously and persistently mentally ill; and, PSA provides supervision and services to defendants awaiting trial in the federal and local courts in DC.

² Given the unique status of the District of Columbia, there are both local and federal agencies that serve DC residents. Of the agencies partnering with Vera on this study, PSA and CSOSA are federal agencies, while MPD, DOC, and DMH are city-level government agencies.

FROM THE PROGRAM DIRECTOR

Most police officers, judges, corrections staff, and others who work within the criminal justice system recognize that a disproportionate number of the people they serve are struggling with untreated psychiatric problems. However, courtrooms, jails, police stations, and probation offices are fast-paced environments, and people working in these settings typically lack the tools and resources necessary to accurately identify those who require mental health supports. As a result, in jurisdictions throughout the United States, large numbers of people who have serious mental illnesses are caught in a cycle of repeated arrest and incarceration without receiving the treatment services that are essential to their recovery. For people who receive treatment while they are in jail, prison, or under the supervision of probation or parole agencies, the challenges of reentry compounded by a lack of coordination between agencies often leads them to lose contact with services when they return home or complete their period of supervision. Enhancing the ability of health and justice agencies to effectively identify and treat people with serious mental illness can improve individual outcomes, save money, and prevent crime.

The Substance Use and Mental Health Program (SUMH) at the Vera Institute of Justice aims to help jurisdictions meet the challenge of serving people with behavioral health needs who are involved in justice systems. This report describes a collaborative research project between SUMH researchers and the police department, jail, pretrial service agency, probation and parole office, and department of mental health in the District of Columbia. By combining information from each of these agencies, this report describes a data resource that is greater than the sum of its parts, providing justice and health professionals and policymakers with the most comprehensive assessment of rates of mental health need among people arrested in DC to date. The findings can help to target treatment and assessment resources toward those who require support. They also provide a compelling example of how data-sharing between agencies can improve the reach and impact of services for this vulnerable population.

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Introduction

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A large and growing body of research indicates that throughout the United States, people with mental health problems are overrepresented in the criminal justice system. Research conducted by Henry J. Steadman and colleagues found that 15 percent of male jail inmates and 31 percent of female jail inmates had current serious mental illnesses—rates that are much higher than in the general population.¹ Another recent study found that there are three times as many people with serious mental illnesses in the country's jails and prisons as in its hospitals.²

Yet only a fraction of this population gets help while incarcerated. A recent study by the Bureau of Justice Statistics at the U.S. Department of Justice found that only 34 percent of people in state prisons who have signs of mental health problems received services to address their needs; of those in jail, only 17 percent received services.³ These low rates of service provision may stem from a combination of factors including a failure to accurately identify mental illness, insufficient capacity to serve those with identified needs, and a typically narrow window of opportunity to engage and serve those in need as they pass through jails.⁴

In recent years, there has been an increase in treatment and diversion opportunities for people with mental health problems who are involved in the criminal justice system, including mental health courts, alternatives to incarceration, and jail-based reentry services. There is evidence that these types of diversion programs can increase access to treatment and reduce recidivism. The common thread connecting many of the initiatives is the well-founded belief that people with mental health problems who are involved in criminal justice systems need uninterrupted treatment services as they move between criminal justice and community settings. Nevertheless, providing this treatment is a significant challenge. There are longstanding barriers to cross-agency coordination—ranging from legal regulations governing the sharing of information to limited technological capacity to differing missions of justice and health agencies. It is also difficult to work with these clients, who often have high rates of drug use and homelessness and frequently fail to complete treatment programs. 6

This report, based on the work of the District of Columbia Forensic Health Project, conducted by the Substance Use and Mental Health Program at the Vera Institute of Justice, addresses two questions:

- > Which people arrested in DC have mental health needs?
- > When this population comes into contact with local and relevant federal criminal justice agencies, do these agencies recognize their mental health needs?

Vera researchers aimed to provide government agencies and community-

based organizations in DC with practical information about the populations they serve and to prompt discussions about ways to improve current models of identification and service provision. The report begins with a background section, followed by a description of the project methods. These are followed by the study findings, a discussion of the findings, and a final section presenting recommendations.

Background

In most jurisdictions across the United States, including Washington, DC, many people who come into contact with the criminal justice system have mental health needs. A 2006 study screened 859 people arrested by DC's primary law enforcement agency for co-occurring mental health and substance use disorders and found that 38 percent of this group displayed some signs of mental health problems. A 2005 survey of misdemeanor defendants in the Superior Court of the District of Columbia found that 24 percent of the sample had a need for mental health services. Mental health needs are common among the local probation, parole, and supervised release populations, as well; approximately 32 percent of Court Services and Offender Supervision Agency for the District of Columbia (CSOSA) clients reported some indication of mental illness during an interview with probation and parole officers.

Over the past decade, elected officials and government agency administrators in DC have given high priority to improving services for people with mental health needs who are involved in the criminal justice system. In 2006, the Criminal Justice Coordinating Council (CJCC), an independent agency that serves as a convening body for criminal justice stakeholders in DC, created the multi-agency Substance Abuse Treatment and Mental Health Services Integration Taskforce (SATMHSIT) to identify ways to enhance the quality of care and coordination of services for people with mental health and substance use needs who come into contact with the criminal justice system.

The task force commissioned several qualitative research studies to explore this topic that became the foundation for a detailed strategic plan. Based in large part on the sequential intercept model, the plan provides recommendations to improve identification of and service provision to people with mental illness at every point of the criminal justice system. Since the strategic plan was issued, DC agencies have focused on expanding existing programs and implementing new initiatives in accordance with the plan's recommendations. These include MPD's Crisis Intervention Officers, the DC Jail Mental Health Unit, the DMH Jail Liaison, PSA's Specialized Supervision Unit for those under pretrial supervision who have mental health treatment needs, and CSOSA's Mental Health Supervision Team.

DC government agencies and stakeholders recognize the importance of improving mental health services for people involved with the criminal justice

Over the past decade, DC agencies have given high priority to improving services for people with mental health needs who are involved in the criminal justice system.

Identifying people who need mental health services is the first step to their receiving appropriate care.

system; however, there has been no comprehensive cross-agency effort to provide a quantitative analysis of the mental health needs of this population or opportunities to increase rates of identification and treatment. Identifying people who need mental health services is the first step to their receiving appropriate care. A number of DC agencies screen their clients with this aim in mind, but there are many reasons that these screening processes may only be partially successful. For instance, agencies may only screen a minority of the people they contact, the screening tools used may be more effective at identifying certain mental illnesses than others, or the environment where screenings are conducted may limit disclosure of needs. Furthermore, it may be exactly those with the greatest need for psychiatric care who are least likely to self-report their treatment needs.

Some agencies report statistics on mental health needs of their clients, but this analysis is dependent upon each agency's ability to collect accurate and complete data. Criminal justice and community mental health agencies could improve their capacity to identify mutual clients' needs by sharing information about these people. To do so, however, they would have to overcome existing legal, ethical, and logistical barriers to information-sharing on mental health treatment needs. Given these impediments, information on diagnosis, medication regimens, or service need is often agency-specific and rarely travels with people as they move between settings. As a result, those who require urgent mental health services may fail to receive care as they pass between criminal justice agencies or when they return to the community.

The lack of information-sharing also means that there is no comprehensive description of the aggregate level of need for people who come into contact with the criminal justice system. Without this information, agencies are limited in their ability to effectively plan programming and allocate funding for essential services for this population, or evaluate whether their current screening procedures are effective in identifying clients in need of services.

Methodology

This project created an unprecedented dataset by bringing together client-specific administrative records from DMH and four DC-based criminal justice agencies: MPD, PSA, DOC, and CSOSA.¹³ More specifically, the project merged and analyzed information from mental health and criminal justice agencies for a cohort of people arrested during June 2008 by MPD in order to:

- > Estimate overall rates of mental health needs among people arrested in DC.
- > Provide the demographic and charge profile of people arrested in DC who have mental health needs.
- > Determine rates of identification of mental health needs by DC agencies.

- > Describe current gaps in identification of mental health needs.
- > Craft recommendations for improving identification of underserved groups and sharing information between agencies in order to improve coordination of care.
- > Provide a benchmark that allows DC and relevant federal agencies to monitor the progress of initiatives to improve identification of mental health needs and increase access to psychiatric services for individuals involved with the criminal justice system.
- > Support the aims of the 2009-2015 Strategic Plan for Persons with Serious and Persistent Mental Illness or Co-occurring Mental Health and Substance Use Disorders Involved in the Criminal Justice System in the District of Columbia.¹⁴

The original study design included an investigation of the cohort's mental health and substance abuse problems, recognizing the significant overlap and interrelationship of these issues. To conduct this analysis, Vera planned to include data from DC's Addiction Prevention and Recovery Administration (APRA) describing contact with community substance abuse treatment services. However, APRA was unable to provide this information because of technical problems with its database. Consequently, the study focused solely on mental health issues.

THE STUDY COHORT

This study was based on the group of 3,731 adults arrested by MPD in June 2008. The research team selected this month because it is recent enough to provide information relevant to the current circumstances in Washington, DC, while allowing sufficient time for the resolution of most of the cases in the cohort, recognizing that cases may take years to complete. MPD provided administrative records for this group, including data on arrest date and location, charges, demographics, and administrative identifiers.

Of the 3,731 people arrested in June 2008, 23 percent were excluded from the analysis. In most cases, this was because they lived outside of DC, making them ineligible for DMH community mental health services (n=472), or because MPD did not provide a Police Department Identification (PDID) number, used to match data across criminal justice agencies (n=362). Others were excluded because their arrest records in the MPD data file did not include first and last name (n=21), which is required to match these files with DMH data. Compared to the cohort, the excluded group was more likely to be white and to have a public order or traffic offense as their most serious offense at booking (Appendix B, Figure A details the excluded cases).¹⁶

The remaining 2,874 people arrested in June 2008 (the "cohort") formed the basis of these analyses.¹⁷ In Appendix B, Figure A lists cohort demographics and charges and Figure C details residence and arrest locations. Most of the

cohort was male (77 percent), the majority was black (89 percent), and the most serious offense at booking for the June 2008 arrest was most frequently a public order, drug, or violent offense (including misdemeanor simple assault). About 55 percent of the cohort contacted one or more criminal justice agencies in addition to MPD in relation to the June 2008 arrest. 19

DATA COLLECTION

In addition to the MPD data described above, researchers compiled administrative records for cohort members from each of the partner agencies' respective databases; these data span the period between January 2006 and March 2011. ²⁰ The aggregate dataset includes:

- > **DMH** data describing client mental health diagnoses, service contact, inpatient treatment, and medication as recorded by DMH-licensed community-based service providers.²¹ These data were extracted from DMH's eCura data system, which is primarily used for processing claims and authorizations for services. This database is used by DMH-licensed service providers and captures many of the mental health services provided in DC outside of criminal justice settings.²²
- > **PSA** data describing cases filed, release status, conditions of release (for example, release on recognizance, release on bond, release to supervision units), and information on mental health assessments and treatment. These data were extracted from PSA's database PRISM for all PSA contacts between January 2006 and June 2008; this information was also provided for PSA contacts between July 2008 and March 2011, but only if the contacts were linked to the June 2008 arrest.²³ For the purposes of analysis, researchers defined a "PSA contact" as an instance in which a person was released to PSA supervision with conditions, prior to adjudication.²⁴
- > **DOC** data on admissions and releases, case status, case events (for example, sentence date), and mental health diagnoses were extracted from two databases, JACCS (jail admission and custody data) and EMR (mental health data).
- > CSOSA data on supervision periods, supervision type, and supervision status, release conditions, and supervision teams were extracted from CSOSA's SMART database. CSOSA also provided data on clients' self-reported mental health needs and history of service delivery. This information is reported separately in Part V.

DATA COLLECTION

To address the dearth of robust clinical data on the mental health needs of people arrested in DC, this study includes mental health data from several sources to estimate the overall level of need.

DEFINING MENTAL HEALTH NEED

There is a dearth of robust clinical data on the mental health of people arrested in DC. To address this gap, the current study includes mental health data from multiple sources in order to estimate the overall level of need. For the purposes

of this report, a person with a mental health need is defined as someone for whom there is any indication of mental health problems recorded between January 2006 and March 2011 in the database of at least one of the partner agencies (DMH, PSA, DOC, or CSOSA).²⁵ Because there is no consistent marker of need across agencies, researchers used a range of data elements to measure mental health need, from assignment to a specialized mental health probation caseload to a clinical diagnosis. (For full details on each agency's data elements that are included in the measure of mental health need, please refer to Appendix A.) The variation in markers of need reflects each agency's specific operational requirements, screening processes, and database capacity.

In the absence of a consistent clinical measure of psychiatric disorders that spans agency databases, this measure is the best available proxy of mental health need for the study cohort. However, given that this construct only captures those mental health needs that are both identified and recorded in one of the agency databases, there are some important caveats attached to its use and interpretation. By definition, this measure will not detect mental health problems that are never identified by any of the agencies; are identified prior to January 2006 or after March 2011; or are identified by an agency but are not recorded in a relevant electronic database. Furthermore, agencies have somewhat different criteria for referral to mental health services, related to agency mandate and the resources available to provide services. Therefore, a marker of mental health need from one agency does not necessarily indicate that a person should be identified as someone in need of services by another agency (for instance, someone with an adjustment disorder diagnosis from DOC may not meet the threshold required to receive services from DMH). Despite these caveats, this approach allows for a far more detailed description of the scope of mental health needs of people arrested in DC and the extent to which agencies identify those needs than previously possible. Furthermore, because the study uses data that agencies already hold, it would be possible to use similar approaches to share existing data for the purpose of improving the identification and treatment of people with mental health needs in DC.

Findings

PART I: WHO HAS A MENTAL HEALTH NEED AMONG PEOPLE ARRESTED IN DC?

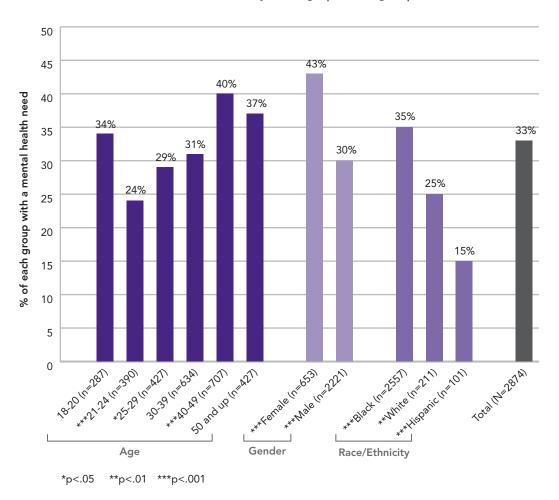
This section details findings on overall rates of mental health need for the study cohort and describes those with mental health needs in terms of demographics, charge type, geography of residence and arrest, and the agencies that hold data on their needs.

About 33 percent (n=955) of the cohort had a mental health need. Rates of mental health need varied across demographic groups in the cohort (see Figure 1).

About 33 percent of the cohort had a mental health need.

Figure 1. Profile of need

Rates of mental health need by demographic subgroups

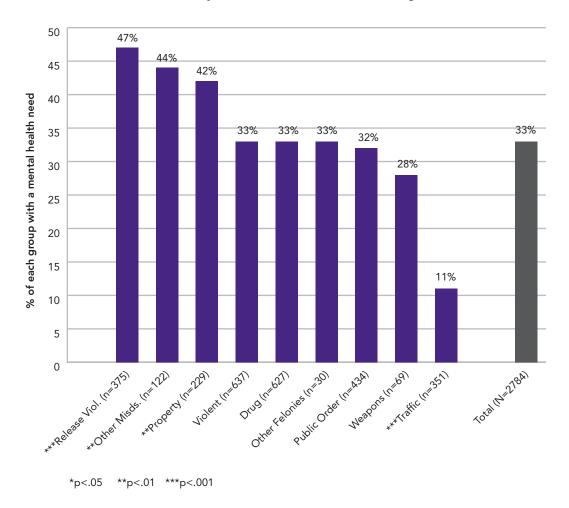


For example, 40 percent of people who were 40 years or older had some record of a mental health need in one of the agency databases, significantly higher than the average rate of need. On the other hand, people in their twenties had significantly lower-than-average rates of need (24 percent of 21 to 24 year olds and 29 percent of 25 to 29 year olds had mental health needs). Rates of mental health need also varied by gender, with women having significantly higher-than-average rates of need (43 percent of women had a need, compared to 30 percent of men). In addition, there were significantly lower-than-average rates of mental health need for people who were white (25 percent) and Hispanic (15 percent).

Higher-than-average rates of mental health need were found among those whose most serious offense at booking was in any of the following categories: release violation/fugitive (47 percent), other misdemeanors (44 percent), and property (42 percent) (see Figure 2). Alternately, there were lower-than-average rates of need for those with a traffic offense as the most serious offense at booking, with only 11 percent of this group having some indication of a mental

Figure 2. Profile of need

Rates of mental health need by most serious offense at booking



health need in one of the agency databases. Those with mental health needs also have more frequent criminal justice contact on average than those without such needs. ²⁶ For example, cohort members with mental health needs had a median of three DOC admissions between 2006 and 2011, as compared to a median of one jail admission for those without mental health needs. ²⁷ Figure E in Appendix B provides detailed information about demographics, most serious offense at booking, and criminal justice histories for those who had mental health needs compared to those who did not. Figure F in Appendix B compares this information across diagnostic categories.

Mental health needs also varied by arrest location, with the highest rates of need among people arrested in ZIP Codes 20005 and 20003, where 45 percent and 39 percent of cohort members had a mental health need, respectively.

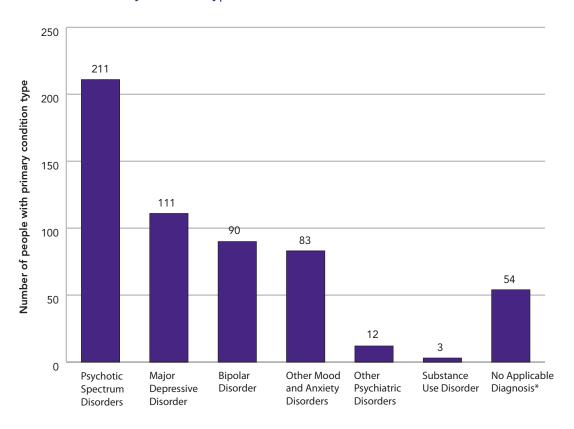
ZIP Code 20005 includes a portion of the business district in downtown DC, near Metro Center and McPherson Square, as well as Logan Circle, a mixed-use neighborhood in Northwest DC. ZIP Code 20003 primarily incorporates the section of Southeast DC that is northwest of the Anacostia River, including

Figure 3. Profile of need

People arrested in the top 10 arrest ZIP Codes who had mental health needs

TOD 40 ADDECT 71D CODEC	PERCENT OF PEOPLE ARRESTED IN EACH ZIP
TOP 10 ARREST ZIP CODES	CODE WITH MENTAL HEALTH NEEDS
20005 (n=74)	45% (33)
20003 (n=105)	39% (41)
20010 (n=129)	37% (48)
20001 (n=289)	36% (105)
20020 (n=222)	35% (78)
20002 (n=339)	33 % (113)
20032 (n=151)	33% (50)
20009 (n=73)	27% (20)
20019 (n=320)	27% (86)
20011 (n=143)	25% (36)

Figure 4. Profile of need
Primary condition type for DMH clients (n=564)



^{*}This group includes people for whom DMH did not have any diagnosis recorded, or for whom the DMH diagnosis was non-specific (for example, deferred diagnosis on Axis I, or unknown cause of morbidity).

the neighborhoods of Capitol Hill, Eastern Market, and Navy Yard, all of which underwent substantial gentrification or redevelopment in recent years. Figure 3 provides detail on rates of need for the top 10 arrest location ZIP Codes.

DMH held data for 59 percent (n=564) of the 955 cohort members with recorded mental health needs, including diagnosis data for 507 people; researchers analyzed the most prevalent mental health diagnosis for the latter group.²⁸ Because many DMH clients have multiple diagnoses, this analysis focuses on the "primary condition," defined for the purposes of this report as the disorder that typically causes the greatest degree of functional impairment. The three most prevalent primary conditions for these 507 cohort members were disorders on the psychotic spectrum (including schizophrenia), major depressive disorder, and bipolar disorder (see Figure 4).²⁹ This figure shows that almost twice as many people had a primary condition on the psychotic spectrum as a diagnosis of major depressive disorder, the second most common type of primary condition. Figure G in Appendix B provides detail on the type and frequency of DMH diagnoses included in the primary condition categories.

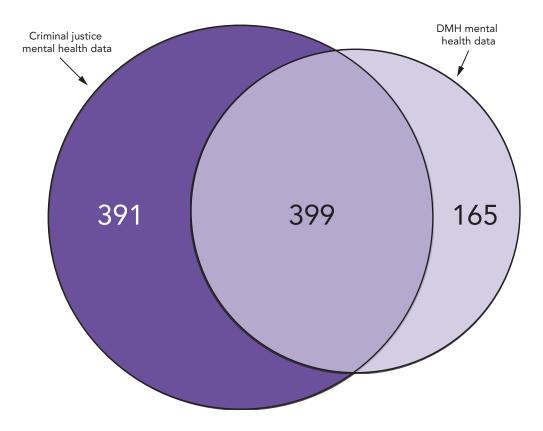
For the study cohort, the predictors of having mental health needs were being female, being black, having more case file dates with PSA, or being arrested on a property offense, release violation or fugitive offense, when controlling for a range of factors using binary logistic regression analysis (see Figure H in Appendix B for the full model and results). Alternately, being arrested on a traffic violation or in the 20019 ZIP Code were both related to significantly lower rates of mental health need. In some cases, these factors in combination predict very high rates of need. For example, 45 percent of all black women in the cohort had an indication of mental health need from a criminal justice agency or DMH, and 48 percent of cohort members who were black and whose most serious offense at booking in June 2008 was for a release violation or fugitive charge had a mental health need. In contrast, only one out of 42 white people with a traffic offense as their most serious offense at booking in June 2008 had an indication of need.

Determining what data on mental health needs each agency holds is an essential foundation for initiatives designed to facilitate continuity of care for people transitioning between criminal justice and community-based mental health services. Thus, in addition to determining overall rates of mental health disorders among people arrested in DC, it is important to understand which of the agencies hold data on these needs. Figure 5 shows how many people's mental health needs were known to DMH or one of the criminal justice agencies, and the extent to which these needs were known to both the criminal justice and mental health sectors. Of the 955 cohort members who had a mental health need, 42 percent had some indication of need recorded in both criminal justice data and DMH data. An additional 17 percent were only known to DMH and 41 percent were only known to one or more criminal justice agencies.

In order to provide a more detailed description of the overlap in the data held by criminal justice agencies and DMH, Vera researchers examined the group Of the 955 cohort members who had a mental health need, 41 percent were only known to one of the criminal justice agencies.

Figure 5. Which agencies hold mental health data for people arrested in DC?

Criminal justice and DMH mental health data resources for the cohort members who have mental health needs (n=955)³²



This analysis highlights the importance of linking people with community mental health services as they transition out of contact with criminal justice agencies.

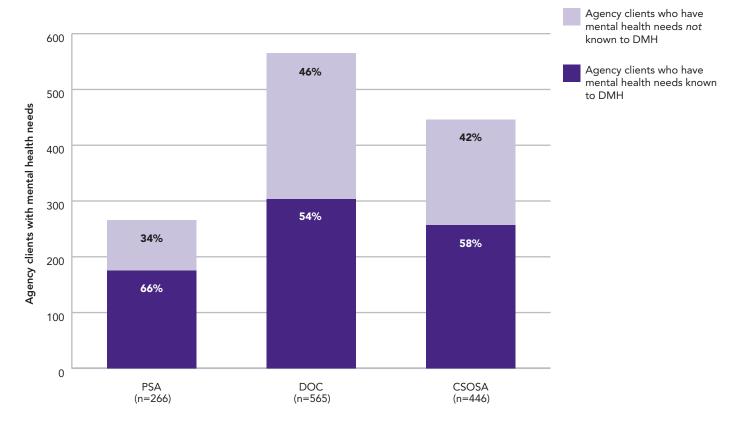
of people with mental health needs identified by each criminal justice agency and the proportion of each group that is also known to DMH as having a mental health need (see Figure 6). This figure illustrates that DMH did not know about the mental health needs of large numbers of people who have been identified by each of the criminal justice agencies as requiring mental health services. For example, nearly half (44 percent) of those who were identified by DOC while in jail between 2006 and 2011 were not receiving services from DMH-affiliated community mental health providers at any point during the same period.

This analysis highlights the importance of initiatives that improve the ability of agencies to link people with community mental health services as they transition out of contact with criminal justice agencies. For clients with acute needs, or those who require continuous access to medication, it is particularly important to develop a seamless handover of service provision between those offering mental health services in criminal justice settings and providers working in the community.

For more than two-thirds of the cohort with a mental health need, either DMH or DOC was the first agency to identify that need. On the other hand, PSA is

Figure 6. Are criminal justice clients with mental health needs known to DMH?

The overlap between people known to criminal justice agencies and DMH as having a mental health need, disaggregated by criminal justice agency

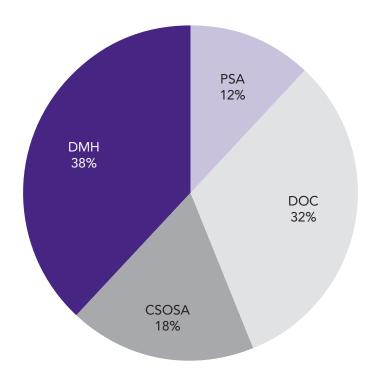


the first agency to identify a person's mental health needs in only 12 percent of cases (see Figure 7). Given that PSA is likely to be the first criminal justice agency that many people come in contact with after the police department, this low rate of first identification highlights an untapped early opportunity to identify the mental health needs of people arrested. Figure 7 details which agency first identified a mental health need between 2006 and 2011.

Of those cohort members who were first identified as having a mental health need by DMH (n=363), 55 percent were also later identified by a criminal justice agency. Of those who were first identified as having a mental health need by a criminal justice agency (n=592), 34 percent were later identified by DMH. The finding that 66 percent of those first identified as having a mental health need by a criminal justice agency were never identified by DMH illustrates the urgent need for improved linkages between criminal justice agencies and community mental health providers. Furthermore, for the 34 percent who were subsequently identified by DMH, the median time from criminal justice agency identification to DMH identification was 271 days. This nine-month delay highlights the enormous potential to improve the speed and efficiency of referral between agencies.

Figure 7. Which agency was the first to identify mental health needs?

Agency to first identify cohort members with mental health needs (n=955)



PART II: ARE AGENCIES IDENTIFYING COHORT MEMBERS WITH MENTAL HEALTH NEEDS WHEN THEY HAVE THE OPPORTUNITY TO DO SO?

In addition to describing the group of people arrested who have mental health needs, a principal aim of this study was to describe whether these needs are identified by a variety of criminal justice agencies when they have an opportunity to do so. To this end, Vera researchers examined the rate at which each agency identified the mental health needs of cohort members who had contact with PSA, DOC, or CSOSA as a result of any cases initiated by the June 2008 arrest. Focusing on this group allowed researchers to examine the extent to which agencies identify mental health needs during a specific encounter. The Vera research team determined which agency contacts resulted from a June 2008 arrest by applying a number of rules and assumptions to the study dataset.33 These contacts are referred to as "index contacts" for the remainder of this report. For instance, if someone was held at the jail while waiting for the resolution of a case initiated by the June 2008 arrest, this DOC commitment will be referred to as an index contact with DOC, or an "index DOC commitment." For CSOSA index contacts, the analysis focuses on index probation sentences (rather than supervised release, parole, or other types of supervision), because the data period may not allow for a sufficient follow-up period for a

person who serves a prison sentence in connection with a June 2008 arrest to return to DC for community supervision by 2011 (the end of the data period).

Among those who had index contact with PSA, DOC, or CSOSA, rates of mental health need varied by agency, with the highest rates of need among the group that had an index DOC commitment. Specifically: of the 878 people with index PSA supervision periods, 37 percent (n=329) had a mental health need; of the 1,009 with index DOC commitments, 49 percent (n=496) had a need; and, of the 450 with index CSOSA probation sentences, 46 percent (n=207) had a mental health need. Figure 8 presents information on index contacts with each agency, the extent to which those with index contact have mental health needs, and the number identified as having a need by each agency during the index contact.

Each agency identified the mental health needs for fewer than half of its respective index clients who may benefit from services, including many with serious conditions (see Figure 8). For example, during the index supervision,

Figure 8. Do criminal justice agencies capitalize on opportunities to identify mental health needs?

Index contacts, overall rates of need among each agency's index clients, and identification of need during index contacts with each agency³⁴

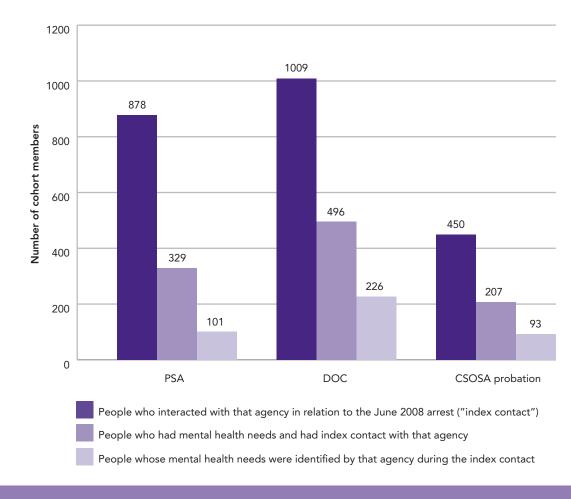
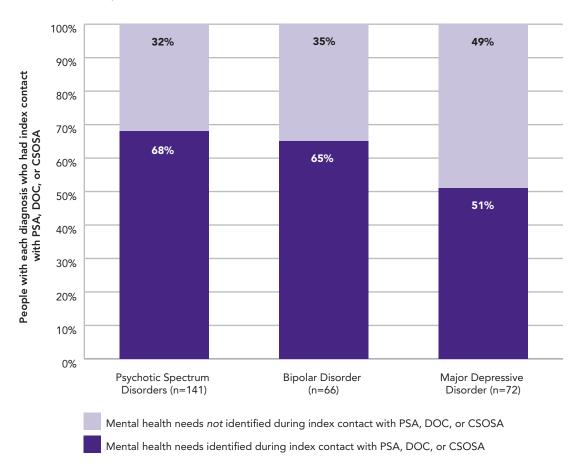


Figure 9. Does identification of mental health need vary by DMH diagnosis?

Rates of identification of mental health need during index criminal justice contacts for people known to DMH, disaggregated by primary condition type



CSOSA identified 45 percent (n=93) of their 207 index probation clients who had a mental health need. A number of cohort members had index contact with more than one agency; thus, slightly more than half (54 percent) of the cohort with mental health needs who had index criminal justice contacts with PSA, DOC, or CSOSA were identified as having a need during index contact with at least one of these agencies.

For those cohort members who had diagnosis data recorded by DMH and had index contact with at least one criminal justice agency following arrest, rates of identification during those index contacts varied by diagnosis: 68 percent of those with a psychotic spectrum disorder were identified as having a mental health need during an index criminal justice contact, as compared to 65 percent of those with bipolar disorder, and 51 percent with major depression (see Figure 9).

PART III: WHAT FACTORS PREDICT UNDER-IDENTIFICATION OF MENTAL HEALTH NEEDS BY DC MENTAL HEALTH AND CRIMINAL JUSTICE AGENCIES?

In order to help study partners identify underserved groups, Vera conducted separate binary logistic regression analyses to describe the characteristics of cohort members with mental health needs who are not identified as having a need by each agency (complete models and findings for DMH, DOC, PSA, and CSOSA are in Figures I through L in Appendix B). The analyses for DOC, PSA, and CSOSA focus on identification during index contacts with those agencies; the DMH analysis takes into account any identification between 2006 and 2011.³⁵

The main demographic factors found to significantly predict which people with mental health needs go unidentified by the various partner agencies were related to age (cohort members with mental health needs who were younger were less likely to be identified) and race (cohort members with mental health needs who were black were more likely to be identified). The research also found that factors such as the number of prior DOC commitments, length of jail stay, or length of CSOSA supervision period were significant predictors of identified mental health needs (for example, cohort members with mental health needs who had longer probation periods, or more previous contacts with an agency, were more likely to be identified). This may be because agencies have more opportunities to identify mental health needs of those with longer or more frequent system contact. This finding highlights the potential of intitiatives that target people who have less frequent contact with the criminal justice system (for example, by focused screening, assessment, and outreach to those entering jail for the first or second time).

Data-sharing can help criminal justice and mental health agencies to quickly and accurately identify the psychiatric needs of people involved with the criminal justice system.

PART IV: WHAT ARE THE DATA-SHARING OPPORTUNITIES TO IMPROVE IDENTIFICATION OF MENTAL HEALTH NEEDS?

This section describes the potential for data-sharing to increase rates of identification of mental health needs. The high incidence of mental health needs underscores the importance of improved communication between mental health and criminal justice agencies in order to coordinate the provision of treatment and other supportive services. Data-sharing can help criminal justice and mental health agencies to quickly and accurately identify the psychiatric needs of people involved with the criminal justice system. Such efforts can also help agencies deliver coordinated services that support people as they transition between custodial and community settings. Furthermore, recognizing that contacts with criminal justice agencies are often brief and provide little opportunity to identify mental health needs, data-sharing can enhance the capacity of agencies to more effectively serve those people with whom they have limited interaction. These approaches have the potential to improve access to treatment services, enhance public safety, and reduce duplication of effort, saving resources.³⁷

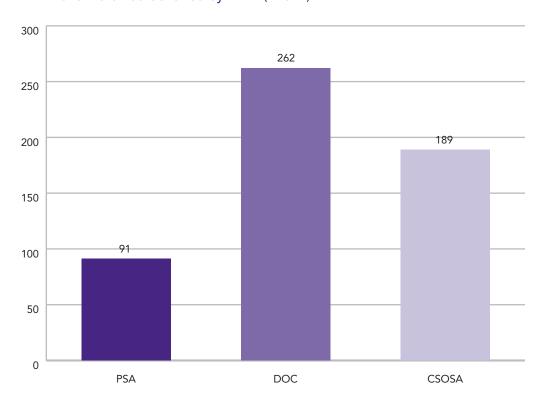
The findings in this section highlight possible sources of data on mental health needs for people who were not identified by DMH and each of the criminal justice agencies. For example, how many of those not identified as having a mental health need by CSOSA had been previously identified by DOC, DMH, or PSA?

If the partner agencies shared data on mental health needs of their mutual clients, it could significantly improve rates of identification of need for the study cohort. Figures 10 and 11 provide detail on the opportunity for data-sharing to improve identification of the mental health needs of people involved in the criminal justice system.

As discussed above, the analysis found 391 cohort members who did not appear in DMH records but had data on mental health needs in criminal justice databases (see Figure 10). 38 Specifically, DOC had mental health data for 67 percent (n=262) of this group; CSOSA had data for 48 percent (n=189); and, PSA had data for 23 percent (n=91).

The finding that DOC held mental health data for the majority of this group illustrates the great potential of cooperative efforts that capitalize on data held by partner agencies. In partnership with DOC, the DMH Jail Liaison is an example of an ongoing initiative to link those in DOC custody with community-based mental health services when they leave the jail. The DMH Jail Liaison reviews jail data to identify DOC inmates who had previous contact with DMH

Figure 10. Opportunities for information sharing
People who have mental health records in criminal justice agency databases and were not identified by DMH (n=391)

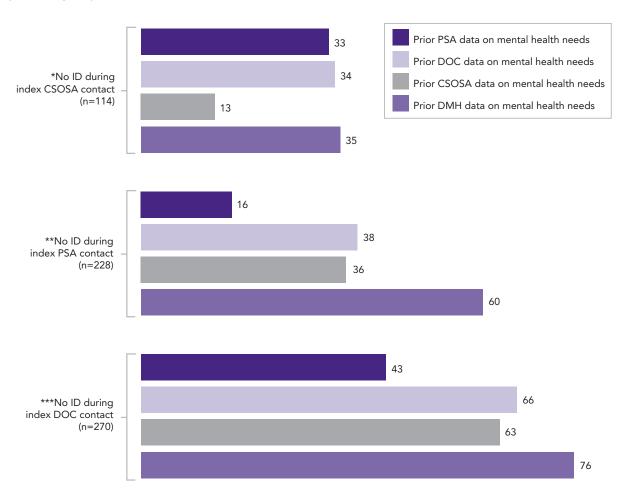


and may benefit from being reconnected to community treatment. Increasing the capacity of this and other similar initiatives (for example, hiring additional staff or automating data-sharing activities) could improve the ability of community health agencies to connect with and serve people involved in the criminal justice system.

Figure 11 illustrates similar opportunities for criminal justice agencies to benefit from data-sharing. As noted in Part II of this report, 46 percent of those with a mental health need who contacted PSA, DOC, or CSOSA as a result of the June 2008 arrest were not identified by any of these agencies as requiring mental health services during the index contact. In some cases, the first identification of mental health need occurred after the index contact. However, in many cases, these people had been previously identified as having a mental

Figure 11. Opportunities for information sharing

People who have mental health records in criminal justice or DMH agency databases and were not identified during an index contact, by criminal justice agency



^{*} CSOSA index probation clients who have a mental health need but were not identified during the index CSOSA contact (n=114).

^{**} PSA index supervision clients who have a mental health need but were not identified during the index PSA contact (n=228).

^{***} DOC index admits who have a mental health need but were not identified during the index DOC contact (n=270).

health need by one or more of the partner agencies. Figure 11 describes data on cohort members' mental health needs held in agency databases at the time of their index contact. Of those whose needs were not identified during an index contact (n=305), 55 percent already had mental health data in at least one database maintained by DMH, PSA, CSOSA, or DOC prior to that index criminal justice contact.

As illustrated in Figure 11, there are information-sharing opportunities unique to each agency that would improve identification. Specifically:

- > DOC: Sharing CSOSA, PSA, and DMH mental health data with DOC could significantly increase identification of DOC inmates with mental health needs. In combination, CSOSA, PSA, and DMH had existing records of mental health needs in their data systems for 49 percent of the 270 people who were not identified by DOC as requiring mental health services during an DOC index commitment. DOC also had existing records of mental health needs for 66 people who were not identified during the index DOC commitment.³⁹
- > PSA: Sharing CSOSA, DOC, and DMH mental health data with PSA could significantly increase identification of PSA clients with mental health needs. Combined, CSOSA, DOC, and DMH maintained information on existing mental health needs for 45 percent of the 228 index PSA supervisees who had a mental health need but were not identified during the index PSA supervision. PSA also had existing records of mental health needs for 16 people not identified during the index PSA supervision.
- > CSOSA: Sharing PSA, DOC, and DMH mental health data with CSOSA could significantly increase identification of CSOSA clients with mental health needs. Of the 114 people on probation who had a mental health need but were not identified by CSOSA during the index contact, 65 percent had been identified by DMH, PSA, or DOC before the index probation period. CSOSA kept records of mental health needs for another 13 people who were not identified during the index CSOSA probation period.

PART V: WHAT ADDITIONAL OPPORTUNITIES FOR IDENTIFICATION OF PSYCHIATRIC NEED ARISE FROM COLLECTING SELF-REPORTED INFORMATION ON MENTAL HEALTH NEEDS?

This section provides information on opportunities to improve rates of identification of mental health need by asking people directly about their mental health histories and current need for services. While PSA, DOC, and CSOSA all record some type of self-reported data, only CSOSA held self-reported mental health information in a format that was amenable to analysis at the time that agencies provided Vera with data for this study. Specifically, CSOSA provided Vera researchers with a number of measures it collects on consumers' self-

There are information-sharing opportunities unique to each agency that would improve identification.

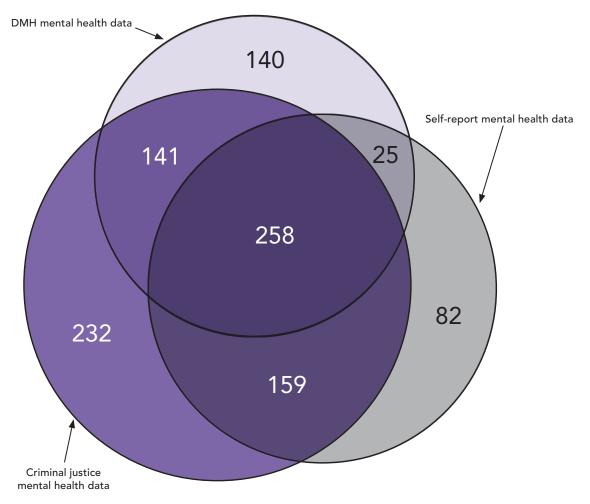
reported mental health histories and needs.⁴⁰ Using these data, the researchers explored whether such self-reporting could improve need identification for people who might otherwise fall through the cracks. While self-reported data are less stringent markers of need than other elements included in the study's measure of mental health need (for example, diagnoses or specialized supervision), self-reported information offers another method of identification. Data collected during brief screening interviews that ask people to report their mental health needs may provide an effective way to identify conditions before they reach a crisis point. Furthermore, asking people to identify their own needs may be essential for those who are encountering the criminal justice system for the first time and have no pre-existing information on record with any agency.

There were 82 people who self-reported mental health needs to CSOSA between 2006 and 2011, but were not found to have a mental health need based on the previous analysis in this report (see Figure 12). A total of 524 people under

Figure 12. The added value of self-reported data

Criminal justice, DMH, and self-reported mental health data resources for cohort members who have mental health needs (n=1037)⁴¹

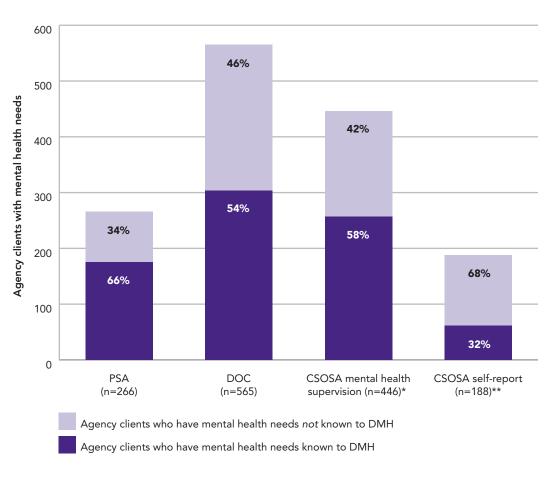
The researchers
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mental health
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people who might
otherwise fall
through the cracks.



CSOSA supervision between 2006 and 2011 self-reported a mental health need as part of the agency's risk and needs assessment interview, equivalent to 33 percent of all CSOSA clients in the cohort. Figure 12 describes the overlap between people who self-reported mental health needs and the groups previously described: those known only to criminal justice agencies, only to DMH, or known to both as having a mental health need. By including self-reported data, the analysis yielded markers of mental health need for 82 people who were not identified using the more stringent measures such as being assessed as requiring treatment, having a psychiatric diagnosis, receiving mental health services,

Figure 13. Are criminal justice clients with mental health needs known to DMH?

The overlap between people known to criminal justice agencies and DMH as having a mental health need, with CSOSA self-reported data added, disaggregated by criminal justice agency



^{*}Inclusion in this "CSOSA mental health supervision" group is based on special conditions of supervision related to mental health or placement on the Mental Health Team caseload for supervision; this group may include people who also self-reported mental health need.

^{**}The "CSOSA self-report" group includes all those who self-reported mental health need but *did* not have a mental health special condition and were not placed on the Mental Health Team for supervision.

or being assigned to a specialized mental health supervision team. The addition of this information increases the proportion of the cohort identified as having a mental health need from 33 percent (n=955) to 36 percent (n=1,037).

Figure 13 duplicates Figure 6, with an additional bar representing CSOSA self-reported data. Of those who reported mental health needs to CSOSA but were not otherwise identified by that agency as having a need (n=188), only 32 percent were known to DMH (see Figure 13). This limited overlap between DMH data on mental health needs and the self-reported data suggests that the CSO-SA self-report questions may identify people who have not been involved with community service providers. It may also mean that this segment includes some people who do not require clinical services. Even if self-reporting overcounts the true prevalence of psychiatric need, it nevertheless has the potential to provide additional opportunities for identification of treatment needs for the significant proportion of people who self-report mental health problems but are not receiving services from either criminal justice agencies or DMH.

In some cases, CSOSA self-reported data would have identified mental health needs sooner than the other markers of mental health needs included in this analysis. For instance, a self-report to CSOSA was the first indication of need for 12 percent of the 1,037 people with mental health needs based on the study data (including the 82 who were only identified via self-report).

Discussion of Findings

The analysis included in this report shows that a significant proportion of people contacting the criminal justice system in DC have mental health needs. Overall, 33 percent of those arrested during June 2008 had an indication of a potential mental health treatment need based on records in at least one of four DC government databases covering the period from 2006 to 2011. Indications of mental health need ranged from a DSM diagnosis by a DMH-licensed provider or DOC contractor, to placement on a specialized mental health supervision caseload with PSA or CSOSA, or assessments indicating a need for mental health treatment.

Criminal justice providers often are the only agencies with records of treatment needs for this population. Of the 955 people arrested during 2008 with a mental health need, 41 percent were not known to DMH and were therefore unlikely to be receiving community treatment services in DC. In two-thirds of cases where a mental health need was first identified by a criminal justice agency, this identification did not precipitate later contact with DMH-licensed community providers. In those instances where someone was first identified as having a mental health need by a criminal justice agency and later appears in the DMH record the average time between these two events is 271 days, or nearly nine months. These findings suggest a need to explore options for more effectively linking people with community mental health providers as they

leave jail or transition out of other forms of criminal justice supervision.

In some cases, the low rates of DMH contact may be the result of cohort members who were assessed by DMH and found not to require services, or who were receiving mental health support from private organizations that are not licensed by DMH. In others, members of the cohort may have elected not to receive services in the community. Many stakeholders in DC have noted that, even when they are able to contact people with mental health needs, it can be extremely difficult to engage them meaningfully in services. This underscores the importance of developing creative engagement strategies that increase the appeal and decrease the stigma of accessing services.

Contact with the criminal justice system provides an important opportunity to start the process of engaging people in supportive services that may help them address their mental health conditions and reduce rates of future offending. However, almost half (46 percent) of those arrested in June 2008 who may have benefited from mental health services were not identified as needing treatment by any of the criminal justice agencies that they contacted as a result of that arrest. For those with mental health needs who went on to enter DOC custody or to be supervised by a probation officer, rates of identification were higher (46 percent and 45 percent respectively) compared to those entering PSA supervision (31 percent).

In part, this may be because of the different opportunities to identify needs and the variety of strategies adopted by these agencies. For instance, pretrial supervision conditions may be limited to verifying an address or submitting to a single drug test after release, providing a fleeting opportunity for PSA to identify mental health needs. While DOC had higher rates of identification than PSA, this figure may still be driven down by the numerous people who pass through DOC custody with short stays; about 12 percent of DOC inmates leave DOC custody before the intake process is complete, and many of them may never make it to the point during the intake process when they would be screened for mental illness.⁴² On the other hand, people sentenced to DOC jail terms may be in custody for months, and CSOSA probation clients may be under supervision for months or years, providing the agencies more opportunities to identify them as having a need.

Similarly, the presentation of different psychiatric disorders may vary widely, and identifying some disorders requires a relatively detailed assessment. For instance, certain disorders are persistent and debilitating, while others may be managed by medication, or may only present when a trigger occurs, such as an acute episode of drug use or a stressful life event. Furthermore, agency structure and responsibility may dictate different thresholds of need to warrant service provision. For example, DMH primarily serves those who are seriously and persistently mentally ill and people who have a mental health diagnosis recorded by DOC may not necessarily meet the DMH criteria for service receipt.

While there are considerable legal, ethical, and technical barriers to datasharing, it is theoretically possible for agencies to dramatically increase rates of identification of mental health needs by sharing information on current or

Almost half of those arrested in June 2008 who may have benefited from mental health services were not identified as needing treatment by any of the criminal justice agencies that they contacted.

former clients. There were 305 cohort members who had both mental health needs (based on records between 2006 and 2011) and had index contact with PSA, CSOSA, or DOC, but were not identified by these agencies as having a need during those index contacts; yet, 55 percent of this group had data on an existing mental health need in at least one database maintained by PSA, DOC, CSOSA, or DMH at the time of the index contact. While different agencies' definitions of mental health need are not entirely equivalent, these data may provide a starting point for identifying individuals who are currently falling through the cracks. For instance, in combination, PSA, DMH, and CSOSA had prior records of mental health needs in their data systems for 132 people who were not identified by DOC as requiring mental health needs during an index DOC commitment. If these records were shared with DOC, rates of identification for people entering jail custody could increase by up to 58 percent.

Two important caveats accompany this analysis. First, it is important to note that the measure of mental health need this study uses is not an independent clinical measure of a psychiatric disorder. Rather, it refers to those who have been identified as having a possible mental health need by at least one of the partner agencies at some point between 2006 and 2011 based on a number of markers, such as specialized mental health supervision caseloads and clinical diagnoses from medical staff in the jail or from DMH clinicians in the community. It may be that a significant number of the June 2008 cohort members would benefit from mental health services but have never been screened or otherwise identified by partner agencies. It may also be the case that a number of the older cohort members had been identified prior to 2006, but do not have subsequent records of mental health treatment in agency databases. Similarly, a member of the study cohort who required treatment in 2006 for a mental health condition may no longer require services in connection with a June 2008 arrest.

Second, the analysis relies on information provided by the study's partner agencies, drawing on datasets that are primarily designed as management tools, not sources of research data. While the Vera research team worked closely with data managers in each of the agencies to understand any idiosyncrasies relating to the information provided, it may be that these data systems do not fully capture the range of mental health services provided by the agencies. Furthermore, this study is not able to correct for inaccurate diagnostic information included in the data provided from each agency, and it is possible that the measure of mental health need both improperly includes people who do not have such a need, or excludes people who do in fact have mental health needs.

Nevertheless, this analysis provides an unprecedented description of the mental health needs of people involved in the criminal justice system in Washington, DC, and the extent to which those who may benefit from mental health interventions are identified by the various study partners. It also offers an example of the potential for data-sharing initiatives to support agency identification of those who require mental health supports and coordination of service provision.

If other agencies' records on mental health needs were shared with DOC, rates of identification for people entering jail custody could increase by up to 58 percent.

Recommendations

Identifying mental health needs and providing treatment before people become entrenched in the justice system is an important preventive strategy.

This section describes recommendations related to: 1) capitalizing on opportunities to identify the mental health treatment needs of individuals who are involved in the DC criminal justice system; and 2) ensuring continuity of treatment for people with mental health needs as they move between criminal justice and community settings. There are a number of concepts that cut across these two sets of recommendations. For example, the management and use of information on mental health needs, and specifically the importance of improving interagency communication, are central to both effective identification and providing continuous access to care. Similarly, the value of initiatives that aim to identify those who require mental health supports earlier—and provide supportive services before people requiring treatment become entrenched in the criminal justice system—is a central theme. Such initiatives can maximize impact by incorporating elements of both collaborative intervention and early identification. Furthermore, these approaches build upon ongoing initiatives in DC and are central to a number of the goals laid out in the CJCC/DMH strategic plan, including "improve data analysis and information sharing" and "increase capacity for identifying and treating persons with serious and persistent mental illness and those with co-occurring mental health and substance use disorders," among others.44

1. Capitalize on opportunities to identify those who are involved in the criminal justice system in DC who may benefit from mental health services.

There are opportunities to increase the rate at which people requiring mental health services are identified by criminal justice agencies and DMH as they pass through the criminal justice system and return to the community.

> Make the most of opportunities for early identification. Identifying mental health needs and providing treatment before people become entrenched within the justice system is an important preventive strategy. Furthermore, if treatment needs are identified at the arrest or pretrial stage, this information can be used to identify those who may be eligible for treatment-based alternatives to incarceration. As noted previously, PSA is the first agency to identify a person's mental health needs in only 12 percent of cases, despite often being the first criminal justice agency that many people are in contact with, after the police. In general, PSA identifies about 31 percent of those with mental health needs during an index contact. The low rates of identification may be the result of minimal opportunity to identify need, given the fleeting contact that PSA has with many of its supervision clients. A data-sharing partnership between PSA and DMH may facilitate identification of need by PSA, as demonstrated by the substantial number of people for whom DMH held data on mental

health needs prior to the index PSA supervision described in the report; if PSA received records from DMH on its clients' mental health needs, PSA could have identified an additional 60 people during the index contact, or 26 percent of those that PSA did not identify.

A short screening measure based on self-reported data may provide a useful means of early identification for mental health needs among those who are encountering the justice system for the first time. For example, the auto-screener tool used by CSOSA to assess probation, parole, and supervised release clients includes a number of questions covering topics ranging from contact with treatment services and receipt of psychotropic medications to history of psychiatric hospitalization and self-identified treatment needs. A similar approach to screening for mental health services is being used by both PSA and DOC; however, at the time of data collection neither agency held this information in a form that is easily extractable for the purposes of analysis or data-sharing. PSA has since upgraded data systems and there may be opportunities to use these data more easily in the future. Information on self-reported mental health needs collected by PSA may be particularly useful in regard to data-sharing, given that many people come into contact with PSA shortly after arrest, providing a unique opportunity for early intervention.

> Target high-need groups. Rates of mental health need were not consistent across the cohort, and one important strategy may be to increase access to treatment services for high-need subgroups of people who are arrested. For example, the analysis of data on mental health needs by arrest location shows that many of those arrested in the 20005 and 20003 ZIP Codes had mental health needs. MPD Crisis Intervention Officers or DMH outreach efforts could target these locations, offering access to low-threshold mental health services. Similar initiatives could target repeat offenders, people arrested on property charges, and those charged with release violations.

It is important to note, however, that efforts to provide services to highneed groups should go hand-in-hand with efforts to identify other groups that may be missed by current initiatives. For example, this analysis shows that the Hispanic cohort members were much less likely to be identified as requiring mental health supports when compared to either those who are white or black. This may represent lower prevalence rates of mental illness among Hispanic people arrested in DC, but it may also be the result of an approach to screening and assessment that is not culturally responsive to the mental health needs of the Hispanic population. In addition, nearly half (45 percent) of the study cohort did not come into contact with CSOSA, PSA, or DOC in connection with the index arrest. As a result, this group has far less access to forensic mental health services and fewer opportunities to be identified as having a need by these agencies, and the data available for this study did not allow for a detailed analysis of the mental health needs of these people. Of the 1,281 who had no contact with PSA, CSOSA, or

Self-reported data may provide a useful means of early identification for mental health needs among those who are encountering the justice system for the first time. DOC agencies in relation to their June 2008 arrest, almost 15 percent appeared in the DMH record, suggesting fairly prevalent mental health needs for this population. Expanding MPD initiatives to identify mental health needs of people arrested and link them to community service providers is one way to begin addressing this issue.

Existing agency data systems offer a potentially powerful tool for increasing rates of identification. > Improve and leverage internal agency data systems. Existing agency data systems offer a potentially powerful tool for increasing rates of identification. The agencies that provided data for this study record a wealth of information on the people they serve, the services the agencies provide, dates of contact, receipt of specialized mental health services, and (for the criminal justice agencies) information on criminal history, current charges, and sentences. However, the format and structure of data systems may make it difficult to use this information to track mental health needs or assess contact with treatment services. In some cases, treatment information is recorded in the form of narrative case notes, which are not easily analyzed or shared. In others, databases describing treatment contact are maintained separately from those that are used for ongoing agency management. For example, DMH records some information on clients contacted by their range of forensic programs separately from eCura, its main community provider database, making it difficult to track people as they move between the various DMH programs.

A data system that is able to identify people requiring mental health services is an essential precursor to both interagency data-sharing and internal monitoring and accountability initiatives. As part of this analysis, researchers discovered that many cohort members who were not identified by an agency during an index contact already had records of mental health needs in relation to a prior contact with that same agency. This information could be used to track clients across contacts. For example, someone who has received treatment services in the past who is returning to the DC jail could be fast-tracked past the usual screening and assessment protocols and linked directly with treatment providers on arrival in custody.

> Develop performance measures to describe and monitor rates of identification and service provision. Agencies may consider collaborating to create performance measures using various data systems in order to monitor the effectiveness and reach of mental health services and improvements over time. For example, this report describes the long delays between first identification of a mental health need by a criminal justice agency and any subsequent contact with community-based mental health services. Improvements in referral systems could be measured by repeating this analysis on a regular basis and comparing the length of time between system contacts to the baseline provided in this report. In addition to these cross-agency efforts, many agencies already monitor progress using their internal data systems; agencies should continue to refine and adapt these

performance indicators to measure progress on the identification and treatment of client mental health needs. Information on the proportion of probationers who are assigned to mental health supervision teams or the average time between diagnosis and a first treatment contact in the jail, for example, could be used to continually monitor agency performance. Furthermore, given the variation in rates of identified mental health needs between different subgroups of the cohort, it may be important to track these measures for specific groups. For example, performance monitoring systems could compare rates of identification for Hispanic people arrested in DC compared to other racial and ethnic groups, or those arrested for traffic offenses compared to other charges.

Rebuilding data systems is expensive and time-consuming. However, minor modifications (such as tracking data across contacts with an agency or targeted data-sharing initiatives) can have a great impact. System upgrades and redesigns, such as the work that is currently underway at the District of Columbia Addiction Prevention and Recovery Administration (APRA), may also provide opportunities for wider-reaching modifications to the way that treatment data are collected and used.

> Increase interagency communication. The potential for interagency datasharing to be used as a tool for improving identification of mental health needs is significant. However, the legal, ethical, and technical obstacles to data-sharing often stymie efforts to improve coordination. There are several examples of focused efforts in DC to improve data-sharing, including the DMH Jail Liaison and the Corporation for Supportive Housing's Frequent User Service Enhancement (FUSE) Initiative. These initiatives are designed to identify people who are involved in multiple systems: the DMH Jail Liaison project matches DMH treatment records with jail admission records to identify mental health clients held in the jail; FUSE tracks those who are serially homeless, have multiple jail admissions, and a mental health diagnosis. These initiatives demonstrate the potential of multiagency data-sharing arrangements; however, because they both use manual data matches, their reach is limited.

A particularly complex web of local and federal privacy regulations govern Washington, DC's agencies. In addition to the Health Insurance Portability and Accountability Act (HIPAA), local agencies must comply with the requirements of the District of Columbia Mental Health Information Act; PSA and CSOSA—both of which are federal agencies—are bound by the Federal Privacy Act. One strategy to help overcome legal barriers to datasharing is to consider the direction of information exchanges. Specifically, regulations governing the communication of health data to criminal justice agencies are far more restrictive than those that regulate information flow in the other direction. It may be possible for DMH to receive information from CSOSA, for example, allowing it to initiate contact with probation and parole clients with identified mental health needs.

The legal, ethical, and technical obstacles to datasharing often stymie efforts to improve coordination.

Another strategy is to seek clients' informed consent to share treatment records. In order to limit possible misuse of data, agencies may want to craft consent forms that allow for data-sharing in particular situations (for example, between a clearly identified source and recipient agency, or, valid for one time only or during a limited period). An alternate approach that provides greater flexibility is to work across agencies to create universal consents allowing the exchange of information between a group of agencies as needed, eliminating many of the challenges associated with more restrictive consents. In either scenario, it is important to implement protections to guard against negative outcomes for clients. For example, access to shared mental health data could be limited to the medical staff working for criminal justice agencies, or the data shared could be limited to general markers of mental health need, without extensive detail on diagnosis and service history. In addition, agencies should ensure that clients are competent to provide informed consent, that they do not feel coerced into providing consent, that they fully understand the potential risks and benefits, and that they have clear opportunities to withdraw consent.

2. Ensure continuity of treatment for people with mental health needs as they move between settings.

One of the primary aims of a comprehensive system of forensic mental health care should be to ensure that people who receive psychiatric services from criminal justice agencies continue to get treatment and support once their period of supervision or incarceration has ended. However, this analysis demonstrates that 62 percent (n=592) of the study cohort who had mental health needs was first identified by a criminal justice system agency and only 34 percent (n=201) of this group was subsequently identified by DMH. In those cases where a DMH identification followed a criminal justice identification of need, the median time between these two events is about nine months (271 days).

Even with a referral to community-based services, ensuring continuity of treatment during periods of transition from custody to the community is extremely challenging. In some cases, individuals who receive treatment as a condition of their supervision or sentence may not wish to continue once they have completed their mandated program. For others, the challenges of jail reentry, a lack of access to psychiatric medication, or the need to find housing or employment can undermine efforts to contact community treatment providers.

Set up targeted information-sharing initiatives between criminal justice agencies and DMH providers. Interagency communication is an essential component of ensuring continuity of care. DMH and DOC databases represent the largest sources of information on the cohort's mental health needs; each agency holds data on 59 percent of all cohort members who have mental health needs. Yet only 54 percent of those known to DOC as

having a mental health need are also known to DMH. Expanding the ca-

Ensuring continuity of treatment during periods of transition from custody to the community is extremely challenging.

pacity of the DMH Jail Liaison to use data to determine shared clients may increase the number of DOC inmates who have access to DMH services once their sentence or pretrial detention is finished. In addition, PSA and CSOSA have shared access to certain data on people who have been supervised by both entities. Strategic data-sharing using this data system has the potential to increase the speed and ease with which PSA is able to identify defendants with mental health needs, despite the sometimes minimal contact between PSA and the supervisees.

> Expand strategies for engaging underserved groups and linking clients with service providers in the community. Because ongoing treatment is central to success and stability for many people returning to their communities, it is essential that criminal justice agencies and DMH work together to achieve seamless transition of care for their mutual clients. There is a growing body of evidence in support of jail in-reach as a model for forging links between people held in custody and community service providers. Jail in-reach is based on the principle that people leaving jail are more likely to maintain contact with providers if they have connected with them in the jail before release and, ideally, are able to continue to meet with the same caseworkers in the community. The DC Jail is currently applying this model of care and, in addition to the DMH Jail Liaison, DOC has contracted a community-based provider, Unity Health Care, to provide health services in the jail. Existing jail in-reach programs could be expanded to include more community-based providers as a way of improving linkages with community mental health services before release. Another example of an initiative that increases opportunities for engagement and coordination is the DMH Court Urgent Care Clinic, which provides an opportunity for immediate referrals to community-based mental health service providers by placing staff from the Psychiatric Institute of Washington at the Superior Court of the District of Columbia. Expanding this program to include more community-based mental health providers onsite at the courthouse may build on principles of the in-reach model to establish relationships between clients and service providers, by making a more seamless referral process and, thus, enhancing the likelihood of follow-up in the community.

It is essential that criminal justice agencies and DMH work together to achieve seamless transition of care for their mutual clients.

Next Steps

These strategies for matching data from various agencies may be useful to other jurisdictions seeking to map the behavioral health needs of local criminal justice populations.

This report presents initial findings from analysis of a comprehensive dataset compiled over a two-year period. These results represent a small fraction of the potential uses of these data. As well as providing an empirical foundation for considering improvements to forensic health services in the District of Columbia, the information in this report can be used as a baseline against which to measure the impact of new initiatives. The process for assembling the dataset described in this report involved lengthy discussions among study partners; now that the partners have jointly established the building blocks for conducting a study of this nature, it will be possible to repeat the analysis in the future with a smaller investment of time and resources.

The methods used for this study were designed to overcome barriers to sharing client-specific data that typically limit the feasibility of compiling crossagency databases for research purposes. While these strategies for matching data from various agencies do not allow for the kinds of real-time data-sharing initiatives that are needed to coordinate interagency case-management services, they may be useful to other jurisdictions seeking to map the behavioral health needs of local criminal justice populations as a tool to inform the design of interventions and to drive policy change.

ENDNOTES

- H.J. Steadmean, F.C. Osher, P.C. Robbins, B. Case, and S. Samuels, "Prevalence of Serious Mental Illness Among Jail Inmates," *Psychiatric Services*, 60, no. 6 (2009).
- 2 E.F. Torrey, A.D. Kennard, D. Eslinger, R. Lamb, and J. Pavle, More Mentally III Persons Are in Jails and Prisons than Hospitals: A Survey of the States, http://www.treatmentadvocacycenter.org/ storage/documents/final_jails_v_hospitals_study.pdf (accessed September 27, 2011) (Treatment Advocacy Center and the National Sheriff's Association, 2010).
- 3 D.J. James and L.E. Glaze, Mental Health Problems of Prison and Jail Inmates, http://bjs.ojp.usdoj.gov/content/pub/pdf/mhppji.pdf (accessed September 27, 2011) (Washington, DC: Bureau of Justice Statistics, 2006).
- 4 J. Mellow, S.K. Hoge, J.D. Lee, M. Natarajan, S.V. Yu, R.B. Greifinger, and G. Belkin, Mapping the Innovation in Correctional Health Care Service Delivery in New York City (New York, NY: Bellevue Hospital Center; New York University School of Medicine; and, the Criminal Justice Research and Evaluation Center of the John Jay College of Criminal Justice, 2008).
- 5 H.J. Steadman and M. Naples, "Assessing the Effectiveness of Jail Diversion Programs for Persons with Serious Mental Illness and Co-Occurring Substance Use Disorders," Behavioral Sciences and the Law 23 no. 2 (2005): 163-170; D.E. McNiel and R.L. Binder, "Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence," American Journal of Psychiatry 164, no. 9 (2007): 1395-1403; and, M. Cosden, J.K. Ellens, J.L. Schnell, Y. Yamini-Diouf, and M.M. Wolfe, "Evaluation of a Mental Health Treatment Court with Assertive Community Treatment," Behavioral Sciences and the Law 21, no. 4 (2003): 415-427.
- 6 National GAINS Center for People with Co-Occurring Disorders in the Justice System, The Prevalence of Co-occurring Mental Illness and Substance Use Disorders in Jails, Fact Sheet Series (Delmar, NY: Author, 2001); J.D. Draine, M.S. Salzer, D.P. Culhane, and T.R. Hadley, "Role of Social Disadvantage in Crime, Joblessness, and Homelessness among Persons with Serious Mental Illness," Psychiatric Services 53, no. 5 (2002): 565-572; and, E. F. Torrey, Nowhere to Go: The Tragic Odyssey of the Homeless Mentally III (New York: Harper & Row, 1998).
- 7 National Opinion Research Council at the University of Chicago (NORC), Screening Arrestees for Indicators of Co-Occurring Disorders (Chicago: NORC, 2006).
- 8 Superior Court of the District of Columbia, Social Service Needs of Defendants in D.C. Cases (Washington, DC: District of Columbia Superior Court, 2006).
- 9 Personal correspondence with CSOSA Office of Research and Evaluation, September 2011.
- 10 Department of Mental Health (DMH)/Criminal Justice Coordinating Council (CJCC), 2009-2015 Strategic Plan for Persons with Serious and Persistent Mental Illness or Co-Occurring Mental Health and Substance Use Disorders Involved in the Criminal Justice System in the District of Columbia (Washington, DC: DMH/CJCC, December 2007).
- 11 The sequential intercept model aims to capitalize on intervention points for people with mental illnesses at each stage of criminal justice contact, maximizing opportunities for successful intervention (see: Mark R. Munetz and Patricia A. Griffin, "Use of the Sequential

- Intercept Model as an Approach to Decriminalization of People With Serious Mental Illness," *Psychiatric Services* 57, no. 4 (2006): 544-549).
- 12 For a more thorough discussion of these issues, see the unpublished 2011 Vera report, DC Forensic Health Project Stakeholder Meeting: A Meeting Summary and Next Steps for Information Sharing in the District (available from jparsons@vera.org).
- 13 A full description of the method used to link datasets and a discussion of the assumptions underlying our analysis is included in Appendix A. Washington, DC does not have a prison in its jurisdiction; many people arrested in DC serve their prison terms in Federal Bureau of Prisons (BOP) facilities. Because people arrested in DC may wind up in a variety of BOP facilities, Vera's researchers could not collect the pertinent BOP data; they were therefore unable to track the complete arc of DC cases with prison sentences.
- 14 Relevant goals of the CJCC/DMH strategic plan include: increase capacity for identifying and treating persons with serious and persistent mental illness and those with co-occurring mental health and substance use disorders; increase opportunities for crisis intervention and other alternatives to incarceration; improve connections to substance abuse and mental health treatment and support services for defendants and offenders in the community, and inmates at the jail; target specific populations for treatment and diversion outcomes opportunities; and, improve data-sharing and information sharing.
- 15 People who were under 18 years of age at arrest and those designated as juveniles in the MPD database at the time of the June 2008 arrest are not included among the 3,731 described here.
- 16 This report uses the race and ethnicity language recorded by MPD. The "most serious offense at booking" refers to the most serious June 2008 arrest charge (as defined by MPD). Figure B in Appendix B lists the three most common offenses in each aggregate offense category.
- 17 The vast majority of the cohort members (96 percent) were arrested one time in June 2008; another 4 percent had two arrests in June 2008 and 0.3 percent had three or more arrests. For those with more than one arrest in June 2008, the report analysis is based on the person's last arrest in that month.
- 18 The "violent" offense category includes misdemeanor simple assault, as it is not possible to ascertain from the criminal code if the alleged offense was for an act of physical violence or non-physical threats. Consequently, this category may be over-inclusive. Note that MPD also codes this offense as "violent."
- 19 Appendix B, Figure D details agency contact. Those who did not contact PSA, CSOSA, or DOC related to the June 2008 arrest were more likely to be white or have a public order or traffic offense as the most serious offense at booking, and were less likely to have a release violation, drug, violent, or property offense.
- 20 The partner agencies' data systems were launched and used in a consistent manner at varying points in time and, therefore, no data prior to January 2006 were included in the analysis. As a result, there may be people in the cohort who had mental health needs identified prior to 2006 who were not identified as having a mental health need in this study.
- 21 DMH primarily provides services to individuals who are deemed to be seriously mentally ill and, thus, not all people with a DSM

diagnosis are necessarily eligible for these services.

- 22 This does not include services provided in a private practice setting. In addition, DMH's Forensic Mental Health programs use supplemental data collection tools that may include data that are not captured by eCura. The supplemental data were not recorded in a form that is amenable to analysis and were not included in this study.
- 23 A small number (n=17) of the cases related to the cohort's index arrests were ultimately sealed; as a result, information for these cases may not have been available for the index events. In addition, PSA did not provide data for any contacts that resulted from a new arrest for the period of July 2008 through March 2011.
- 24 PSA provided information on many types of individual contacts, ranging from those detained prior to trial to those who were under PSA supervision pending trial. Furthermore, PSA did not interview or supervise defendants charged with public order offenses or traffic charges that were prosecuted by the Office of the Attorney General (OAG) of the District of Columbia (as opposed to the USAO) during much of the study period. Thus, there will be low rates of contact between PSA and members of the study cohort arrested on these charges.
- 25 MPD did not provide any information on mental health needs. Therefore, cohort members who have not had contact with PSA, DOC, or CSOSA will be less likely to be identified as having any mental health needs in this study.
- 26 Frequency of criminal justice contact is estimated by the number of case filing dates and number of admissions into DOC custody between 2006 and 2011.
- 27 A median value is one type of "average value" and refers to the middle value when all values of a given variable are arranged in ascending order.
- 28 DOC is the only criminal justice agency that provided data on diagnosis details. For consistency, the DOC data are not included in the analysis presented in Figure 4, which is based solely on DMH diagnosis data.
- 29 These diagnoses are based on the DSM-IV-TR.
- 30 A "case file date" refers to the date a case is registered with the court, as recorded in PSA's database. Binary logistic regression is a statistical technique used to determine predictors for a given outcome (e.g., mental health needs) when holding other factors constant (e.g., demographics, charge type).
- 31 Low rates of DOC, PSA, and CSOSA contact for these groups (white people or those arrested on traffic offenses) offer fewer opportunities for these agencies to identify the needs of these subpopulations.
- 32 This figure was created using "BioVenn, a web application that helps create area-proportional Venn diagrams," which can be found at http://www.cmbi.ru.nl/cdd/biovenn/. For more information on this application, refer to T. Hulsen, J. de Vlieg, and W. Alkema, "BioVenn a web application for the comparison and visualization of biological lists using area-proportional Venn diagrams," BMC Genomics 9, no. 1 (2008): 488-493.
- 33 These rules were based on conversations with agency staff and general assumptions about the processing of criminal cases. Some examples of these methods include linking dates from various datasets to identify which agency contacts are related to the index event (for example, linking MPD arrest dates with DOC admission dates), or applying inclusion criteria based on knowledge of the DC criminal justice system (for example, only including PSA supervision clients, rather than those with fleeting contact with PSA before pretrial detention and have little or no

- opportunity for service receipt). Details are provided in Appendix A.
- 34 The rates of identification represented in Figure 8 across different agencies are for descriptive purposes and are not intended to provide a comparative measure of agency performance, given the differences in the nature, intensity, and length of interaction that each agency has with the people they contact.
- 35 Vera examined the extent to which criminal justice agencies were able to identify mental health needs during specific encounters with cohort members that related to the June 2008 arrest (referred to throughout the report as "index contacts"). Because arrests do not automatically trigger DMH contact (there are no index DMH contacts), the researchers were not able to conduct analysis of comparable DMH data. Thus, the research team included all DMH identifications of need for the cohort that occurred between 2006 and 2011 for the purposes of this analysis.
- 36 Race has limited utility as a tool for targeting screening and assessment practices because the overwhelming majority of people arrested in DC are black (see Figure A in Appendix B).
- 37 See Vera's unpublished 2011 report, *DC Forensic Health Project Stakeholder Meeting: A Meeting Summary and Next Steps for Information Sharing in the District*, for a discussion of data-sharing issues (contact jparsons@vera.org for copies).
- 38 Of the 391 people whose mental health needs are known only to criminal justice agencies, 40 percent have mental health need data recorded by more than one criminal justice agency. Thus, there is some overlap in the counts of which criminal justice agencies hold mental health data for the cohort.
- 39 Many people stay in the jail for extremely short periods. This may limit the ability of DOC to assess the mental health treatment needs of these inmates.
- 40 Since it provided information for this study in 2011, PSA has implemented data system upgrades that will make it easier to access its data on self-reported mental health needs in the future.
- 41 This figure was created using "BioVenn, a web application that helps create area-proportional Venn diagrams," which can be found at http://www.cmbi.ru.nl/cdd/biovenn/. For more information on this application, refer to T. Hulsen, J. de Vlieg, and W. Alkema, "BioVenn a web application for the comparison and visualization of biological lists using area-proportional Venn diagrams," BMC Genomics 9, no. 1 (2008): 488-493.
- 42 Personal correspondence with Reena Chakraborty, DOC Statistician, on October 27, 2011.
- 43 Our estimate that 33 percent of cohort members have mental health needs is roughly comparable to a previous study of the mental health issues of people arrested in DC; in 2006 a National Opinion Research Council pilot study of a screening tool to be used at MPD booking found that 38 percent of people arrested (n=773) answered "yes" to question indicating some level of mental health need (National Opinion Research Council at the University of Chicago (NORC), Screening Arrestees for Indicators of Co-Occurring Disorders (Chicago: NORC, 2006)). When this study included self-reported mental health data in the analysis, the rate of need increased to approximately 36 percent of cohort members.
- 44 Department of Mental Health (DMH)/Criminal Justice Coordinating Council (CJCC), 2009-2015 Strategic Plan for Persons with Serious and Persistent Mental Illness or Co-Occurring Mental Health and Substance Use Disorders Involved in the Criminal Justice System in the District of Columbia (Washington, DC: DMH/CJCC, December 2007).

Appendix A—Methodology Details and Glossary

DATA MATCHING

Vera researchers matched the MPD cohort data with the other criminal justice agencies' databases using the Police Department identification number, or "PDID" (a common identifier held by each of Vera's criminal justice partner agencies). Using a two-step process, they matched MPD records with information in the DMH database using a number of mechanisms based on a combination of name and date of birth. They then reviewed the resulting data file for any false matches. Each of the agencies supplied information stripped of all personal identifiers, with an encrypted identifying number that allowed Vera researchers to reconnect the data from the various databases. The resultant dataset includes anonymized information from MPD, DMH, PSA, DOC, and CSOSA and provides a holistic picture of each cohort member's recent history of criminal justice involvement and mental health needs.

GLOSSARY

PARTNER AGENCIES

- > CSOSA. The Court Services and Offender Supervision Agency for the District of Columbia is a federal agency that is responsible for managing probation, parole, and supervised release for DC Code offenders who are released to community supervision.
- > **DMH.** The Department of Mental Health is the agency that oversees the provision of public mental health services in DC through community-based providers and government services to people who are seriously and persistently mentally ill. DMH also accepts referrals through the criminal justice system.
- > **DOC.** The District of Columbia Department of Corrections is a local city agency that is responsible for the oversight of people who are detained prior to trial and those who are sentenced to jail time. DOC operates the Central Detention Facility (DC jail), which primarily houses male inmates. DOC also contracts with private companies that oversee the Correctional Treatment Facility, which houses females and juveniles, and four halfway houses.
- > **MPD.** The Metropolitan Police Department of the District of Columbia is the primary law enforcement agency in DC and accounts for the majority of arrests. In addition to MPD, there are several other policing agencies operating in the District (for example, the United States Parks Police and the Metro Transit Police Department).
- > PSA. Pretrial Services Agency for the District of Columbia is an indepen-

dent entity within CSOSA. PSA provides the court with recommendations regarding which people are appropriate for pretrial release. PSA also provides community supervision to defendants who are released while awaiting trial.

RESEARCH VARIABLES

Given the varied content, structure, and time periods contained in agency databases, the study applied a number of rules in order to operationalize—define for the purposes of measurement and analysis—concepts such as "mental health need" or "index contact" within a given agency. These rules, which are described in detail below, were largely based on conversations with agency staff and basic assumptions about the processing of criminal cases.

Index contact definitions for criminal justice agencies. "Index" contacts with each of the agencies are defined as those events that are connected to the June 2008 arrest (the basis for inclusion in the study cohort). For example, one method used to determine which DOC commitments were related to June 2008 arrests was to flag instances when MPD arrest dates in June 2008 matched a DOC admission date. Another example is the decision to only examine CSOSA probation contacts related to the June 2008 arrest, given the long periods that would likely elapse between arrest and other types of supervision, such as parole or supervised release. More detailed definitions of index contacts with criminal justice agencies are as follows:

- > **Index MPD arrest.** Because a number of people were arrested more than once during 2008, the index arrest was defined as the last MPD arrest date for a given person during the month of June 2008.
- > Index PSA supervision. Because PSA is primarily responsible for supervising people released pending case resolution ("pretrial release"), this study uses "index contact with PSA" to refer only to those people who were released to PSA supervision pending trial (PSA may not have adequate contact with those who are detained to be able to screen everyone who appears in the PSA data system). PSA's responsibilities have shifted over the period covered by this study and in 2008 the agency was not responsible for supervising individuals charged with certain minor offenses (for example, traffic and public order) that were being prosecuted by the Office of the Attorney General of the District of Columbia. PSA identified which entries in the data system were related to June 2008 arrests. The research team defined an index PSA supervision period as any instance flagged by PSA as connected to a June 2008 arrest in which a person is conditionally released after the date of the index arrest.
- > Index DOC incarceration. There are a number of routes that may lead a

Appendix A—Methodology Details and Glossary

person into DOC custody in relation to the index arrest. In order to capture these multiple pathways, the study team combined date information from various agencies and applied rules based on the way in which cases are generally processed. For instance, PSA and DOC both hold information on the date that mutual clients are released from DOC custody. Thus, if a DOC release date was the same as a release date in a PSA record that PSA flagged as an index event, this was deemed to be an index commitment.

> Index CSOSA probation period. Given the potentially long periods between an index arrest and the start of any post-prison supervision requirements (such as supervised release), the research team restricted index CSOSA supervision contacts to index probation contacts. Again, the team combined data from various agencies in order to determine which events were likely to be connected to the index arrest date and applied rules based on the way in which cases are generally processed. For instance, if the sentence date and a probation period start date were the same, this was deemed an index probation period.

Data elements included in the measure of mental health need. Partner agencies collect and record mental health data specific to the agency's daily operations and needs. As such, the agencies provided a wide range of data elements that are not necessarily interchangeable. For instance, PSA does not record data on mental health diagnoses, but provides information on recommended or received treatment services. DOC, on the other hand, provides data on diagnosis, but not on treatment. Therefore, this study's analysis of mental health need should be understood as an indication of a potential mental health problem, rather than a clinical diagnosis of mental illness. However, Vera's analysis of mental health need is based on the best information available and serves as a useful, if imperfect, proxy. The data elements included in each agency's measure of mental health need are as follows:

- > **Department of Mental Health.** The DMH data elements included in the measure of mental health need are: DMH service contact; inpatient admittance; prescription for psychotropic medication; and/or a mental health diagnosis (not including substance use disorders) recorded in DMH's eCura database. DMH's Forensic Mental Health programs use supplemental data collection tools which may gather data that are not captured by eCura; this data was not recorded in a form that is amenable to analysis, however, and were not included in the measure of mental health need for this study.
- > **Metropolitan Police Department.** No data was provided by MPD on mental health needs.
- > **Pretrial Services Agency.** The PSA data elements included in the measure

of mental health need are any recorded instance of mental health treatment, assignment to the PSA Special Supervision Unit (a specialized mental health unit of supervision within PSA), or a mental health assessment that concluded that the person had a need for services. A person is counted as having a mental health need if any of this information was included in the dataset, even if it was not related to a PSA supervision period (for example, PSA conducts assessments for a wide range of defendants involved in the court system, and the results of these assessment are included in the analysis regardless of whether the assessment preceded a period of PSA supervision for that person). PSA also collects self-reported data as a part of the Pretrial Services Officer's interview; at the time of the analysis, however, this data was not available in a format that was amenable to analysis and was thus not provided to Vera for the purposes of this study.

- > **Department of Corrections.** DOC conducts mental health screening and assessment interviews at the point of intake to the jail. A person was included as having a mental health need if he or she has any mental health diagnosis (not including substance use disorders) in DOC records.
- > Court Services and Offender Supervision Agency. The CSOSA data elements included in the measure of mental health need are any mental health conditions of supervision, and assignment to the Mental Health Supervision team. CSOSA also provided data on self-reported previous mental health diagnoses and/or mental health treatment (including treatment services, medication, or hospitalization) and data on self-identified need for mental health treatment. This data was not included in the main measure of mental health need, but is reported on separately in Part V (see page 24) of the report.

Figure A. Demographics and most serious offense at booking (for study cohort and excluded cases)

CHARACTERISTICS	ALL ADULTS ARRESTED IN JUNE 2008 (N=3731)	STUDY COHORT (N=2874)	EXCLUDED FROM COHORT (N=857)
MALE	77% (2890)	77% (2221)	78% (669)
RACE			
Black	83% (3083)	89% (2557)	61% (526)
White	12% (463)	7% (211)	29% (252)
Hispanic	4% (147)	4% (101)	5% (46)
Asian	1% (38)	0% (5)	4% (33)
MEDIAN AGE	34 years	34 years	34 years
AGE GROUPS			
18-20	10% (361)	10% (287)	9% (74)
21-24	14% (506)	14% (390)	14% (116)
25-29	15% (575)	15% (427)	17% (148)
30-39	22% (838)	22% (634)	24% (204)
40-49	24% (895)	25% (707)	22% (188)
50 and up	15% (554)	15% (427)	15% (127)
Missing	0% (2)	0% (2)	_
RESIDENCY			
DC	76% (2831)	92% (2646)	22% (185)
Non-DC	16% (600)	_	70% (600)
Unknown	8% (300)	8% (228)	8% (72)
MOST SERIOUS OFFENSE AT BOOKING			
Drug	19% (725)	22 (627)	11% (98)
Violent	19% (702)	22% (637)	8% (65)
Traffic	18% (675)	12% (351)	38% (324)
Public Order	18% (659)	15% (434)	26% (225)
Release Violation/Fugitive	11% (420)	13% (375)	5% (45)
Property	7% (260)	8% (229)	4% (31)
Other Misdemeanors	5% (173)	4% (122)	6% (51)
Weapons	2% (82)	2% (69)	2% (13)
Other Felonies	1% (35)	1% (30)	1% (5)

Figure B. Detail for categories of most serious offense at booking

		PERCENT OF EACH
MOST SERIOUS OFFENSE AT BOOKING/OFFENSE DETAIL	FREQUENCY	OFFENSE TYPE
VIOLENT	632	
Simple assault	336ª	53%
Assault with a dangerous weapon	130 ^b	21%
Assault on a member of the police or fire department	42	7%
Other violent offenses	124	20%
DRUGS	628	
Possession of an illicit substance	323°	51%
Possession with intent to distribute an illicit substance	140	22%
Distribution of an illicit substance	123	20%
Other drug offenses	42	7%
PUBLIC ORDER	439	
Prostitution	129	29%
Possession of an open container	116	26%
Disorderly conduct (various types)	94	21%
Other public order offenses	100	23%
RELEASE VIOLATIONS/FUGITIVE	375	
Failure to appear	203	54%
Fugitive from justice	101	27%
Probation or parole violation	46	12%
Other release violations/fugitive offenses	25	17%
TRAFFIC	351	
No permit	151	43%
DUI- or DWI-related charges	72	21%
Operating after suspension	68	19%
Other traffic offenses	60	17%
PROPERTY	229	
Theft (various types)	77	34%
Destruction of property	37	16%
Unauthorized use of vehicle	33	14%
Other property offenses	82	36%

(Figure continued on next page)

a Including 23 simple assault offenses designated as domestic violence.

b Including two offenses designated as domestic violence.

c Including 144 cases of possession of marijuana.

Figure B. Detail for categories of most serious offense at booking

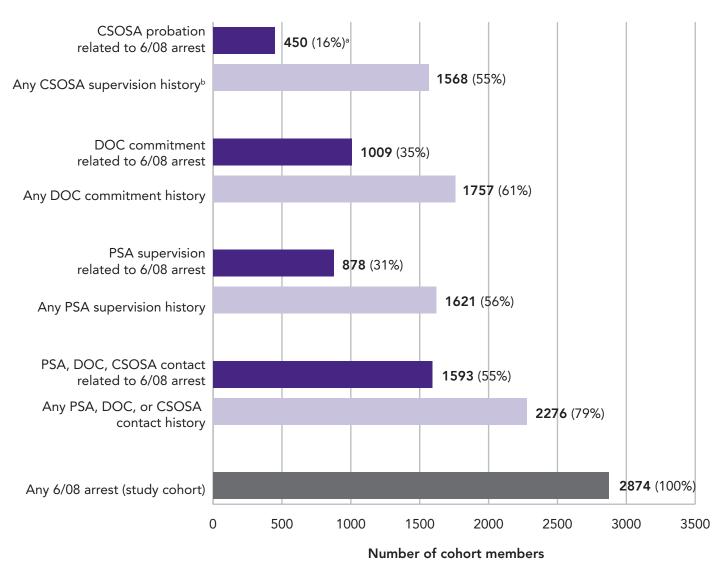
(Figure continued from previous page)

MOST SERIOUS OFFENSE AT BOOKING/OFFENSE DETAIL	FREQUENCY	PERCENT OF EACH OFFENSE TYPE
OTHER MISDEMEANORS	121	
Unlawful entry	48	40%
Paternity support	29	24%
Contempt of court (misdemeanor)	15	12%
Other misdemeanor offenses	29	24%
WEAPONS	69	
Carrying a pistol without a license (first offense)	41	59%
Possession of prohibited weapons	11	16%
Unregistered ammunition	4	6%
Other weapons offenses	13	19%
OTHER FELONIES	30	
Conspiracy	6	20%
Contempt of court (felony)	6	20%
Uttering	3	10%
Other felony offenses	15	50%
TOTAL	2874	

Figure C: ZIP Code of residence and ZIP Code of arrest for the study cohort

TOP 10 ZIP CODES	PERCENTAGE OF COHORT WITH A RESIDENCE IN THE ZIP CODE (N=2874)	PERCENTAGE OF COHORT WITH AN ARREST IN THE ZIP CODE (N=2874)
20002	25% (715)	12% (339)
20019	13% (375)	11% (320)
20001	11% (303)	10% (289)
20011	10% (274)	5% (143)
20020	8% (240)	8% (222)
20032	4% (129)	5% (151)
20010	4% (128)	4% (129)
20003	4% (115)	4% (105)
20009	4% (103)	3% (73)
20018	3% (81)	Not top 10 for ZIP Code of arrest
20005	Not top 10 for ZIP Code of residence	3% (74)
No ZIP Code data	8% (228)	0% (3)





a The percentage of the full study cohort (N=2,874). These categories are not mutually exclusive.

b For the purposes of this figure, "history" refers to any contact that occurred between 2006 and 2011.

Figure E. Demographics for those with and without mental health needs

	STUDY COHORT (N=2874)	MENTAL HEALTH NEED (n=955)	NO MENTAL HEALTH NEED (n=1919)
MALE	77% (2221)	73% (700)***	79% (1521)
RACE/ETHNICITY			
Black	89% (2557)	96% (915)***	86% (1642)
White	7% (211)	6% (55)**	8% (156)
Hispanic	4% (101)	2% (15)***	4% (86)
Asian	0% (5)	0% (1)	0% (4)
MEDIAN AGE	34 years	38 years	33 years
AGE GROUPS			
18-20	10% (287)	10% (99)	10% (188)
21-24	14% (390)	10% (100)***	15% (290)
25-29	15% (427)	13% (128)*	16% (299)
30-39	22% (634)	21% (202)	23% (432)
40-49	25% (707)	30% (289)***	22% (418)
50 and up	15% (427)	17% (167)*	14% (260)
Missing	0% (2)	0% (1)	0% (1)
MOST SERIOUS OFFENSE AT BOOKING			
Drug	22% (627)	23% (219)	21% (408)
Violent	22% (637)	23% (217)	22% (420)
Traffic	12% (351)	4% (42)***	16% (309)
Public Order	15% (434)	15% (139)	15% (295)
Release Violation/Fugitive	13% (375)	19% (180)***	10% (195)
Property	8% (229)	10% (100)**	7% (129)
Other Misdemeanors	4% (122)	6% (56)**	3% (66)
Weapons	2% (69)	2% (22)	2% (47)
Other Felonies	1% (30)	1% (11)	1% (19)
CJ HISTORY—MEDIAN NUMBER OF POST- 2006 DOC COMMIT DATES	1 commit date	3 commit dates	1 commit date
CJ HISTORY—MEDIAN NUMBER OF POST- 2006 PSA CASE FILING DATES	2 filing dates	3 filing dates	1 filing date
ANY DMH TREATMENT	20% (564)	59% (564)	N/A
DMH TREATMENT TYPE ^a			
Medication	12% (342)	36% (342)	N/A
In-patient treatment	3% (78)	8% (78)	N/A
Other services	18% (525)	55% (525)	N/A

^{*}p<.05 **p<.01 ***p<.001

a These subcategories are not mutually exclusive.

Figure F. Demographic and charge information by primary condition type^a

					OTHER
		PSYCHOTIC		MAJOR	MOOD AND
	STUDY	SPECTRUM	BIPOLAR	DEPRESSIVE	ANXIETY
	COHORT	DISORDERS	DISORDER	DISORDER	DISORDERS
	(N=2874)	(n=211)	(n=90)	(n=111)	(n=83)
MALE	77% (2221)	70% (148)	61% (55)	61% (68)	73% (61)
RACE/ETHNICITY					
Black	89% (2557)	93% (196)	96% (86)	95% (105)	93% (77)
White	7% (211)	5% (10)	4% (4)	5% (6)	5% (4)
Hispanic	4% (101)	2% (4)	_	_	2% (2)
Asian	0% (5)	0% (1)	_	<u>—</u>	_
MEDIAN AGE	34 years	42 years	39 years	42 years	33 years
AGE GROUPS					
18-20	10% (287)	3% (7)	11% (10)	7% (8)	14% (12)
21-24	14% (390)	7% (15)	10% (9)	10% (11)	7% (6)
25-29	15% (427)	12% (26)	11% (10)	6% (7)	19% (16)
30-39	22% (634)	20% (43)	21% (19)	18% (20)	23% (19)
40-49	25% (707)	36% (75)	32% (29)	35% (39)	24% (20)
50 and up	15% (427)	21% (44)	14% (13)	23% (26)	12% (10)
Missing	0% (2)	0% (1)	_	_	_
MOST SERIOUS OFFENSE AT					
BOOKING					
Drug	22% (627)	20% (42)	26% (23)	24% (27)	25% (21)
Violent	22% (637)	26% (54)	23% (21)	21% (23)	17% (14)
Traffic	12% (351)	3% (6)	_	5% (6)	5% (4)
Public Order	15% (434)	17% (35)	9% (8)	17% (19)	14% (12)
Release Violation/Fugitive	13% (375)	18% (38)	22% (20)	18% (20)	25% (21)
Property	8% (229)	10% (21)	12% (12)	10% (11)	2% (2)
Other Misdemeanors	4% (122)	6% (12)	2% (2)	3% (3)	8% (7)
Weapons	2% (69)	1% (2)	2% (2)	1% (1)	1% (1)
Other Felonies	1% (30)	0% (1)	2% (2)	1% (1)	1% (1)
CJ HISTORY—MEDIAN					
NUMBER OF POST-2006 DOC	1 commit date	3 commit dates	2 commit dates	2 commit dates	2 commit dates
COMMIT DATES					
CJ HISTORY—MEDIAN					
NUMBER OF POST-2006 PSA	2 filing dates	3 filing dates	3 filing dates	2 filing dates	2 filing dates
CASE FILING DATES					

a Note that the category "other psychiatric disorders" is not included here, as there were only 12 cases that fell in this category.

Figure G. DMH primary condition categories and subcategories

PRIMARY CONDITION CATEGORIES AND DIAGNOSES INCLUDED IN EACH	FREQUENCY OF DIAGNOSIS TYPE	PERCENT OF TOTAL RECORDED DMH DIAGNOSES
PSYCHOTIC SPECTRUM DISORDERS	273	18%
Schizophrenia	108	_
Other Psychotic	165	_
MAJOR DEPRESSIVE DISORDER	184	12%
BIPOLAR DISORDER	140	9%
OTHER MOOD AND ANXIETY DISORDERS	316	21%
Other Depressive Disorders	276	_
Anxiety Disorders	37	_
Mood Disorders	3	_
OTHER PSYCHIATRIC DISORDERS	41	3%
Other	22	_
Behavioral/Impulse Disorders	19	_
NO APPLICABLE MENTAL HEALTH DIAGNOSIS	551	37%
Unspecified Diagnosis	216	_
Substance Use-Related Problem	266	_
Severity Descriptor	47	_
Medical Condition	13	_
Axis IV	9	_
TOTAL RECORDED DMH DIAGNOSES FOR THE COHORT	1505	100%

Figure H. Binary logistic regression model

Predictors of having a mental health need for the full study cohort (N=2874) (Nagelkerke R-Square=0.195)

VARIABLE	EXP (B)	SIGNIFICANCE	S.E.
Age (years)	1.012	0.001***	0.004
Female	1.924	0.000***	0.100
Black	1.693	0.001***	0.158
Arrest on other charges (other felonies, other misdemeanors, or weapons charge)	1.186	0.327	0.174
Arrest on property charge	1.412	0.042*	0.170
Arrest on violent charge	1.104	0.441	0.128
Arrest on public order charge	0.909	0.509	0.145
Arrest on release violation or fugitive charge	1.636	0.001***	0.144
Arrest on traffic charge	0.332	0.000***	0.196
Number of PSA case filing dates in study dataset	1.224	0.000***	0.015
Arrest ZIP Code = 20019	0.662	0.005**	0.146
Arrest ZIP Code = 20001	0.866	0.326	0.147
Arrest ZIP Code = 20020	0.994	0.969	0.160
Arrest ZIP Code = 20002	0.814	0.132	0.137
Constant	0.084	0.000	0.227

^{*}p<.05 **p<.01 ***p<.001

Figure I. Binary logistic regression model

Predictors of cohort members with mental health needs (n=955) not being identified by DMH during the study period, 2006-2011 (Nagelkerke R-Square=0.068)

VARIABLE	EXP (B)	SIGNIFICANCE	S.E.
Age (years)	0.983	0.003**	0.006
Male	1.190	0.258	0.154
Black	0.514	0.011*	0.263
Arrest on other charge (felonies, misdemeanors, public order, traffic, weapons, release violations, or fugitive charge)	0.949	0.771	0.179
Arrest on property charge	1.117	0.668	0.257
Arrest on violent charge	0.861	0.475	0.209
Any CSOSA supervision period (2006-2011)	1.340	0.089	0.172
Any DOC commitment (2006-2011)	2.088	0.001**	0.229
Any PSA supervision period (2006-2011)	1.121	0.474	1.59
Arrest ZIP Code = 20001 or 20002	1.419	0.036*	0.167
Arrest ZIP Code = 20019 or 20020	1.392	0.079	0.188
Constant	0.766	0.562	0.461

^{*}p<.05 **p<.01 ***p<.001

DMH could increase contact with forensic clients by engaging people with current or prior contact with DOC. The results in Figure I show that people who have a mental health need and a prior contact with DOC are much less likely to be known to DMH (odds ratio 2.09). This can be partly explained by high rates of identification by DOC, creating a large pool of current or former DOC clients with identified mental health needs as compared to those without DOC contact.

Figure J. Binary logistic regression model

Predictors of cohort members with mental health needs and any index DOC commitments (n=496) not being identified by DOC during that commitment (Nagelkerke R-Square=0.118)

VARIABLE	EXP (B)	SIGNIFICANCE	S.E.
Age (years)	0.985	0.087	0.009
Male	1.671	0.018*	0.218
Black	2.892	0.003**	0.355
Arrest on other charge (felonies, misdemeanors, public order, traffic, weapons, release violations, or fugitive charge)	1.016	0.949	0.250
Arrest on property charge	0.772	0.449	0.342
Arrest on violent charge	0.459	0.008**	0.295
Arrest ZIP Code = 20001or 20002	0.957	0.851	0.232
Arrest ZIP Code = 20019 or 20020	0.766	0.316	0.265
DOC length of stay, in days (first index commitment only)	0.997	0.001***	0.001
Number or pre-index DOC commitments	0.972	0.658	0.064
Pretrial status (first index commitment only)	1.179	0.446	0.215
Any PSA supervision period (2006-2011)	0.703	0.164	0.253
Any CSOSA supervision period (2006-2011)	1.168	0.564	0.276
Constant	1.088	0.900	0.672

^{*}p<.05 **p<.01 ***p<.001

Just under half (49.6 percent) of those who had a DOC index contact also had a mental health need (71.9 percent of women and 43.8 percent of men with index DOC contacts). Of that group, DOC successfully identified slightly less than half (45.6 percent) as having a mental health need during the index contact, with women more likely to be identified than men (51.4 percent of women and 43.3 percent of men). Among those with mental health needs, significant predictors of those who are not identified during DOC index contacts include being male (odds ratio 1.67) or being black (odds ratios 2.89). The usefulness of these factors as a tool to target screening and assessment practices is limited, because the jail population is overwhelmingly male and black.

Figure K. Binary logistic regression model

Predictors of cohort members with mental health needs and any index PSA supervision periods (n=329) not being identified by PSA during that period of supervision (Nagelkerke R-Square=0.126)

VARIABLE	EXP (B)	SIGNIFICANCE	S.E.
Age (years)	0.951	0.000***	0.012
Male	1.210	0.488	0.275
Black	0.983	0.975	0.547
Arrest on other charge (felonies, misdemeanors, public order, traffic, weapons, release violations, or fugitive charge)	0.939	0.834	0.353
Arrest on property charge	0.448	0.050*	0.410
Arrest on violent charge	0.755	0.409	0.332
Arrest ZIP Code = 20001or 20002	1.509	0.216	0.332
Arrest ZIP Code = 20019 or 20020	0.903	0.758	0.332
Number of pre-index PSA supervision periods	0.916	0.419	0.127
Any DOC commitment (2006-2011)	1.619	0.154	0.338
Any CSOSA supervision period (2006-2011)	1.482	0.181	0.294
Constant	9.885	0.006	0.832

^{*}p<.05 **p<.01 ***p<.001

Overall, 37.5 percent of those who had an index PSA supervision contact also had a mental health need (54.9% percent of women and 32.1 percent of men with index PSA supervision). Of that group, PSA successfully identified a minority (30.7 percent) as having a mental health need during the index contact, with women more likely to be identified than men (34.5 percent of women and 28.7 percent of men with mental health needs). Among those with mental health needs, analysis found that the significant predictors of identification of mental health need during the index PSA contact were having a property charge as the most serious offense at booking or age (with those who are older being more likely to be identified).

Figure L. Binary logistic regression model

Predictors of cohort members with mental health needs and any index CSOSA probation supervision periods (n=207) not being identified by CSOSA during that supervision period (Nagelkerke R-Square=0.135)

VARIABLE	EXP (B)	SIGNIFICANCE	S.E.
Age (years)	0.995	0.733	0.014
Male	1.613	0.176	0.353
Black	0.362	0.109	0.633
Arrest on other charge (felonies, misdemeanors, public order, traffic, weapons, release violations, or fugitive charge)	0.919	0.828	0.387
Arrest on property charge	1.156	0.783	0.525
Arrest on violent charge	1.194	0.692	0.448
Arrest ZIP = 20001 or 20002	0.824	0.641	0.415
Arrest ZIP = 20019 or 20020	1.003	0.993	0.408
Number of pre-index CSOSA supervision periods	0.936	0.776	0.231
Length of index CSOSA probation period, in days	0.998	0.031*	0.001
Any PSA supervision period (2006-2011)	0.833	0.681	0.444
Any DOC commitment (2006-2011)	4.089	0.033*	0.661
Constant	0.765	0.818	1.165

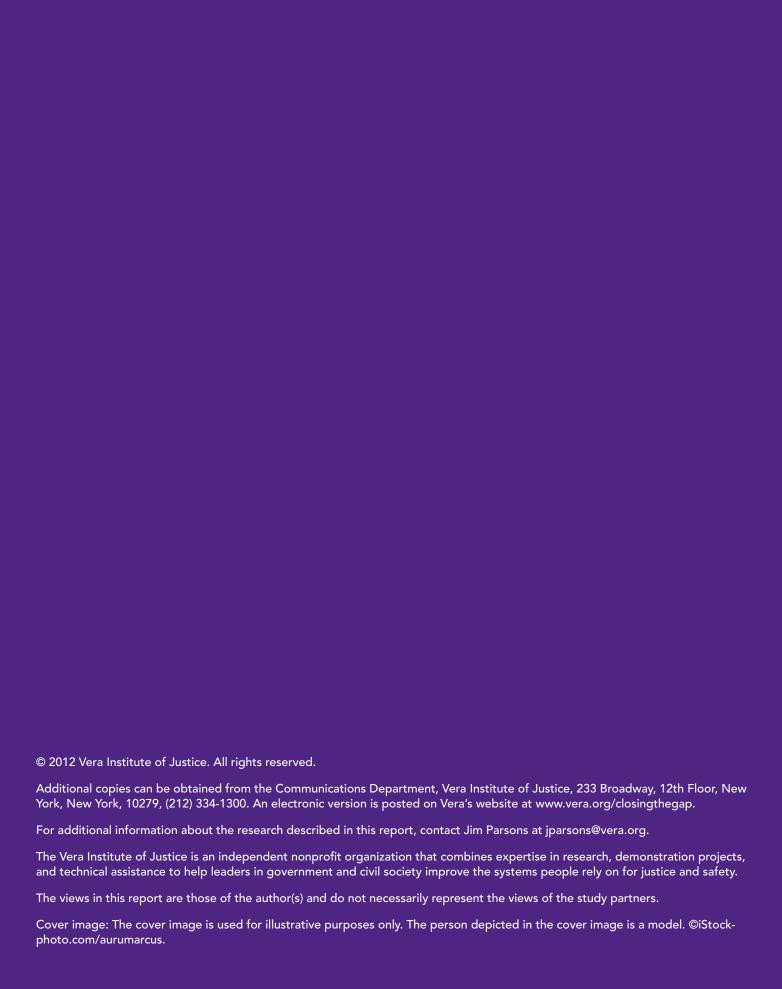
^{*}p<.05 **p<.01 ***p<.001

Overall, 46.0 percent of those who had a CSOSA index probation supervision period had a mental health need (72.6 percent of women and 38.9 percent of men). Of that group, CSOSA successfully identified 44.9 percent as having a mental health need during the index CSOSA probation period, with women more likely than men to be identified (49.3 percent of women and 42.8 percent of men). For those with mental health needs, the length of the index probation period is the only significant predictor of being identified by CSOSA as having a mental health need during the index CSOSA contact, when controlling for a range of factors. The salience of this factor is likely related to exposure; the longer that someone is under CSOSA supervision, the greater the opportunity for them to be identified. Alternately, having a prior DOC commitment is the only significant predictor of not being identified by CSOSA as having a mental health need during the index CSOSA contact, when controlling for a range of factors.

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