



HEALTH

- THE ARTS
- CHILD POLICY
- CIVIL JUSTICE
- EDUCATION
- ENERGY AND ENVIRONMENT
- HEALTH AND HEALTH CARE
- INTERNATIONAL AFFAIRS
- NATIONAL SECURITY
- POPULATION AND AGING
- PUBLIC SAFETY
- SCIENCE AND TECHNOLOGY
- SUBSTANCE ABUSE
- TERRORISM AND HOMELAND SECURITY
- TRANSPORTATION AND INFRASTRUCTURE
- WORKFORCE AND WORKPLACE

This PDF document was made available from www.rand.org as a public service of the RAND Corporation.

[Jump down to document](#) ▼

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis.

Support RAND

[Browse Books & Publications](#)

[Make a charitable contribution](#)

For More Information

Visit RAND at www.rand.org

Explore [RAND Health](#)

View [document details](#)

Limited Electronic Distribution Rights

This document and trademark(s) contained herein are protected by law as indicated in a notice appearing later in this work. This electronic representation of RAND intellectual property is provided for non-commercial use only. Unauthorized posting of RAND PDFs to a non-RAND Web site is prohibited. RAND PDFs are protected under copyright law. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please see [RAND Permissions](#).

This product is part of the RAND Corporation technical report series. Reports may include research findings on a specific topic that is limited in scope; present discussions of the methodology employed in research; provide literature reviews, survey instruments, modeling exercises, guidelines for practitioners and research professionals, and supporting documentation; or deliver preliminary findings. All RAND reports undergo rigorous peer review to ensure that they meet high standards for research quality and objectivity.

R E P O R T

Behavioral Health in the District of Columbia

Assessing Need and Evaluating the Public System of Care

Carole Roan Gresenz, Janice C. Blanchard,
Justin William Timbie, Joie Acosta,
Craig Evan Pollack, Teague Ruder,
Brendan Saloner, Rhondee Benjamin-Johnson,
Robin M. Weinick, David M. Adamson,
Brionna Hair

Prepared for the District of Columbia Department of Mental Health

The research described in this report was sponsored by the District of Columbia Department of Mental Health. The research was conducted in RAND Health, a division of the RAND Corporation.

The RAND Corporation is a nonprofit institution that helps improve policy and decisionmaking through research and analysis. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2010 RAND Corporation

Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Copies may not be duplicated for commercial purposes. Unauthorized posting of RAND documents to a non-RAND website is prohibited. RAND documents are protected under copyright law. For information on reprint and linking permissions, please visit the RAND permissions page (<http://www.rand.org/publications/permissions.html>).

Published 2010 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665
RAND URL: <http://www.rand.org>
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Preface

This report summarizes findings from a study of the public behavioral health care system in the District of Columbia and identifies priority areas and recommendations for improvement. The report should be of interest to policymakers in the District and surrounding local areas, as well as to individuals and organizations concerned with issues related to access to behavioral health care services.

The evaluation was funded by the District of Columbia Department of Mental Health and conducted in RAND Health, a division of the RAND Corporation. A profile of RAND Health, abstracts of its publications, and ordering information can be found at www.rand.org/health.

Summary

S.1. Background

As a result of the tobacco litigation settlement reached in 1998, more than \$200 million was made available to the District of Columbia to invest in the health of the city's residents. In 2007, the District contracted with the RAND Corporation to study the health of District residents and the health care delivery system in the District and provide an informed assessment of policy options for improvement, including through the investment of the tobacco settlement funds. The findings from this work are summarized in two RAND reports (Lurie et al., 2008a, and Lurie et al., 2008b).

Community and provider focus groups were conducted as part of the RAND evaluation. One of the resounding concerns that surfaced was access to health care services for behavioral health issues, including both mental health and substance abuse problems. Primary care physicians in the District, for example, reported significant challenges in finding specialty care for patients enrolled in Medicaid, including notably limited options for Medicaid patients with mental health problems. District residents perceived substantial gaps in the availability of outpatient specialty care. District parents reported that getting behavioral health care for their children was a daunting problem.

These findings pointed to the need for a more intensive study focused on behavioral health and health care in the District and, in particular, on the public behavioral health care system, given its predominant role in the delivery of the relevant services to District residents. In this study, we build on and extend previous analysis of health and health care in the District by

- providing a richer understanding of the prevalence of mental health disorders and substance use among District residents
- characterizing the organization and financing of public behavioral health services in the District
- tracking utilization of public behavioral health services among District residents
- reporting on key challenges facing the District's public behavioral health care system as identified by stakeholders
- summarizing key issues and developing recommendations for improving the District's behavioral health care system.

Our approach blends qualitative and quantitative methods and utilizes data from a wide range of sources, including survey data, administrative data, claims data, and data from focus groups and stakeholder interviews. To estimate the prevalence of mental health disorders and substance use, we primarily use data from four surveys: the Behavioral Risk Factor Surveillance System (BRFSS); the National Survey of Drug Use and Health (NSDUH); the National Survey of Children's Health (NSCH); and the Youth Risk Behavior Survey (YRBS).

To evaluate the utilization of behavioral health care services among District residents, we use administrative data from three sources: eCura, which is the D.C. Department of Mental Health

(DMH) electronic patient management and billing system; Medicaid managed care claims data from managed care organizations operating in the District; and District of Columbia Hospital Association data. For information about the functioning of the behavioral health care system, we rely on stakeholder interviews and focus groups. For a detailed discussion of our data sources, see Chapter 1.

S.2. Key Findings

Below we summarize key findings from our analyses of the prevalence of mental health disorders, substance use, and substance use disorders among District residents; analyses of utilization of public behavioral health services among District residents; and our stakeholder interviews and focus groups.

Prevalence of Behavioral Health Disorders

For the District to be able to appropriately and strategically plan for its behavioral health system, foundational knowledge about the population's behavioral health care needs and access to services is critical. Toward that end, we described the prevalence of mental health disorders and estimated potential levels of unmet need for specific types of mental health care in the District, using the best data available from a combination of the surveys cited above. We were unable to perform similar analyses to estimate potential unmet need for substance abuse treatment because there are no data on which to base estimates of the reach of the services provided by the Addiction Prevention and Recovery Administration (APRA), the District's agency with responsibility for providing public substance abuse prevention, treatment, and recovery services. We were unable to obtain a data extract from APRA's client management system, owing to its recent implementation. Historical data on levels of service use were also unavailable.

Our analyses suggest the following key findings:

- The prevalence of mental health conditions in the District resembles patterns nationally, among both adults and youth. One exception is that, compared to children nationally, D.C. youth appear to have a higher percentage of parent-reported behavioral problems.
- Suicide attempts among District high school students are more common than among high school students nationally, and prevalence appears to be rising in the District. Among high school students who attempt suicide, District youth are twice as likely to require medical care because of an injury.
- District adults have a higher burden of illness on measures of heavy drinking, binge drinking, alcohol dependence, and inadequacy of treatment. Binge alcohol use and heavy alcohol use increased over the last decade, although the trend has reversed somewhat between 2003 and 2008.
- District youth are less like to use or abuse alcohol across several measures than youth nationally, and alcohol use and binge drinking have decreased over the past decade.
- District adults had a higher prevalence of drug use and drug use disorders than the national average on five of seven measures, including higher percentages of marijuana and cocaine use and illicit drug dependence or abuse.
- District youth had a higher estimated prevalence of lifetime use of heroin, nonprescription steroids, and any injectable illegal drug but have similar or lower levels

of crack, marijuana, methamphetamine, and ecstasy use compared to their peers nationally.

- Among District youth, prevalence of marijuana use has decreased since the late 1990s, but the use of illegal injectable drugs and steroids has increased.

In addition, with regard to potential unmet need for behavioral health care services:

- Our analyses suggest that potentially several thousand District residents have unmet need for mental health care services for severe mental illness, and potentially 60 percent of adults and 72 percent of adolescents enrolled in Medicaid managed care who have depression have unmet need for depression services.
- Gaps in surveillance surveys made it impossible to estimate levels of potential unmet need among children with severe mental health conditions.
- Enrollees in the DC Healthcare Alliance (Alliance, a public program that provides access to health care to eligible District residents) and uninsured residents have significant mental health needs, with at least 12,000 adults and adolescents potentially having depression alone. Utilization among these individuals is not captured systematically, and, therefore, the level of unmet need cannot be readily estimated.

Utilization of Public Behavioral Health Care Services

To the extent possible with available data, we analyzed the levels and types of service use among District residents served by the public behavioral health care system. We summarize key findings related to use of services by enrollees in the District's Mental Health Rehabilitation Services (MHRS) programs; by adults and children enrolled in Medicaid managed care; by children with disabling mental health conditions enrolled in the Health Services for Children with Special Needs (HSCSN) program, a specialized managed care plan; and to use of emergency department services for mental health conditions among all District residents.

Based on claims data describing utilization by MHRS enrollees, we find that:

- 60 percent of children and 54 percent of adults enrolled in MHRS have over 10 visits per year to a Core Services Agency (CSA) treatment facility. CSA is a provider that contracts with DMH to provide mental health rehabilitation services.
- Approximately 16 percent of children and 15 percent of adults enrolled in MHRS have contact with the MHRS system only one or two times per year. For individuals undergoing active treatment for severe mental illness, such utilization rates are likely to be inadequate.
- Only 10 percent of children and 5 percent of adults enrolled in MHRS receive intensive community-based treatment for mental health issues in the forms of community-based intervention (CBI) and assertive community treatment (ACT), respectively.
- 45 percent of children and 41 percent of adults enrolled in MHRS have gaps in care that exceed six months during a 12-month period, and 19 percent of children and 18 percent of adults have gaps of ten months or longer.

Based on Medicaid managed care organization (MCO) claims data on utilization by adults and children enrolled in Medicaid managed care, we found that:

- 11 percent of children and 17 percent of adult enrollees with mental health disorders who had at least some mental health services use had no outpatient visits over the course of one year but had one or more inpatient admissions or visits to an emergency department (ED) during the same period.
- Among youth Medicaid managed care enrollees with psychotic or bipolar disorders who used some mental health services, 25 percent had at least one inpatient admission over a 12-month period and 29 percent had one or more ED visits. Among adult enrollees with these same disorders who used some mental health services, 20 percent had inpatient stays and 18 percent had ED visits.
- 4 percent of children and 6 percent of adult Medicaid MCO enrollees who received some mental health services during the course of a year received them exclusively through EDs.
- Thirty-day readmission rates after a mental health hospitalization were 20 percent for children and 16 percent for adults.
- A minority of adult Medicaid MCOs enrollees had office visits in the 30 days following a mental health–related inpatient stay (18 percent) or following discharge from the ED (18 percent).

Our analyses of claims data from the District’s HSCSN program show the following:

- A substantial fraction of children with disabling mental health disorders had no mental health specialty visits, including nearly three-fourths of children with an emotional disturbance, two-thirds of children with adjustment disorders, more than half of children with a depressive disorder, and one-third of children with an episodic mood disorder.
- Approximately 10 percent of children with episodic mood disorders and 9 percent of children with emotional disturbance received care exclusively through the ED. Children with episodic mood disorders were far more likely to have multiple inpatient stays and repeated ED use compared to other HSCSN enrollees.

Our analyses of hospital discharge data indicate that:

- Between 2004 and 2008, rates of ED utilization for bipolar disorder more than doubled for residents ages 18–39 and increased fourfold for residents ages 40–64.
- The rate of ED use associated with schizophrenia is considerably higher in Wards 7 and 8 compared with all other parts of the District; rates are as much as twice the District-wide rate for most age groups.
- The rate of ED use associated with all mental health conditions among residents of Wards 7 and 8 is much higher than the District average.
- The rate of ED use for substance abuse disorders increased by 50 percent among 40–64 year olds and doubled among 18–39 year olds over the last several years, fueled by increases in Wards 4–8.

Focus Groups and Stakeholder Interviews

We conducted interviews with a wide range of individuals and organizations to provide insight into the behavioral health safety net system in the District of Columbia. Interviewees included government employees from behavioral health agencies, providers of mental health and substance abuse services, primary care providers, insurance company executives, representatives

of hospitals, local nonprofit organizations, and researchers and experts on the delivery of behavioral health care.

Participants highlighted several major challenges to the optimal provision of behavioral health services in the District. Two recurring themes were gaps in care and difficulties in coordination of care for particular populations and particular services. Other themes revolved around challenges related to housing, financing, information technology, and quality measurement. We describe some of the key concerns in what follows.

- A number of stakeholders voiced concern that individuals who do not qualify for MHRS may have difficulty accessing mental health services. In particular, those covered under Alliance are vulnerable due to the lack of coverage for mental health service. This concern over lack of access was echoed in the previous report's community stakeholder focus group (Lurie, et al, 2008b). Further, interviewees expressed concerns over a lack of targeted services for specific populations with mental illness, including geriatric consumers; transitional-age youth (under 21 years old) who are not under the care of the Child and Family Services Agency (CFSA, the District agency responsible for protecting at-risk children and child victims); foreign-language speakers in the School Mental Health Program (SMHP); and gay, lesbian, bisexual, and transgender clients.
- Interviewees also described gaps in care for individuals with substance use disorders. Providers described patients frequently arriving in a state of crisis, requiring immediate services that are not currently provided by the substance abuse treatment system.
- People with mental health and substance abuse disorders interact with a host of different agencies and programs. A major challenge facing these individuals is a lack of coordination among the organizations that provide mental health and/or substance abuse services. Barriers to care coordination include mental health providers' inability to bill for time spent in coordination activities, as well as general concerns over patient privacy and lack of an information technology infrastructure.
- Interviewees noted several concerns about substance abuse treatment specific to the youth population, including a dearth of programs and a need for better assessment tools for the intake process. With regard to mental health, stakeholders discussed a lack of several programs and services, including residential programs for youth, youth-focused community-based services, child psychiatrists, and services for children with mental retardation.
- Stakeholders noted that individuals with developmental disabilities may face particular challenges. In particular, stakeholders felt that not enough attention was paid to diagnosing and treating individuals with developmental disabilities, that the Department of Disability Services (DDS) lacks resources and capacity, and that misperceptions of mental illness result in individuals with disabilities being referred to a comprehensive psychiatric emergency program when they may more appropriately be treated by other providers.

- Interviewees described a lack of housing for individuals and families in the District with mental health and/or substance abuse problems. Providers in the focus groups described consumers being placed into unneeded treatment categories and settings solely for the sake of obtaining housing.
- For homeless individuals, interviewees described a need for greater coordination of services with surrounding jurisdictions. Interviewees expressed concern that there were few programs for homeless persons with substance abuse problems and that APRA was not sufficiently involved in the District’s homeless services system.
- Stakeholders expressed concerns that the proliferation of separate behavioral health data systems prevents coordinating care across providers and across systems. The lack of connection, stakeholders stated, not only impeded direct patient care but also led to a system that was unable to adequately plan for the community’s needs. More generally, stakeholders described a lack of connection between DMH’s and APRA’s data systems.
- Many stakeholders felt that there was still a need for better quality assessment as a means for continued improvement of quality of care. However, they noted that difficulty in obtaining accurate data impeded their ability to understand what aspects of the system were working well.

S.3. Summary of Priority Areas and Recommendations

Our assessment suggests five high-level priorities for the District. We summarize these and describe recommendations related to each in what follows.

Priority Area 1: Work to reduce unmet need for public mental health care.

A key concern is whether the existing patchwork system of care for individuals with mild to moderate mental health disorders who are uninsured or in the Alliance is sufficient for meeting their behavioral health needs. Closing the gap in care could be achieved through investment in expanded mental health benefits for Alliance enrollees and/or investment in free or discounted mental health treatment capacity, including through local clinics or freestanding mental health centers (FSMHCs).

In addition, our analyses suggest the existence of a sizeable pool of individuals (of unknown insurance status) who have severe mental illness but are not connected to MHRS. Outreach is crucial to ensure that eligible individuals with severe mental illness are enrolled in MHRS. The District could establish formal systems for partnering with local hospital EDs and other organizations to identify individuals with severe mental illness who are not connected to the system, enabling follow-up by MHRS staff.

Priority Area 2: Track and coordinate care for individuals in the public system with mental health diagnoses.

A notable opportunity exists for DMH to develop systems to

- identify individuals with significant behavioral health problems who are already enrolled in the system via Medicaid, MHRS, or HSCSN
- set standards for minimally indicated care based on diagnoses
- track progress toward ensuring that enrollees receive minimally indicated services.

Improvements in this area are likely to require significant care coordination and outreach to enrolled individuals.

Priority Area 3: Improve the availability and accessibility of substance abuse treatment services

The best available data suggest that adult District residents have unmet need for substance abuse treatment services. While insufficient capacity may be one explanation for unmet need, another explanation is the difficulty patients report with APRA's central intake system. Another issue is outreach. Service providers indicated that many clients are unaware that the voucher system exists and do not know how to access substance abuse treatment services. Although APRA has recently revised its website to be more user-friendly for residents, limited community outreach by APRA about how to access services might have contributed to the community's lack of awareness.

Finally, opportunities may exist to further leverage federal Medicaid dollars for substance abuse treatment. Substance abuse services in the District are financed mainly with local dollars, although an estimated 19 percent of APRA's clients are eligible for Medicaid (District of Columbia Official Code, 2008). More than half of all states provide substance abuse services under Medicaid, such as inpatient detoxification, pharmacy services, outpatient and inpatient services beyond detoxification, and methadone maintenance. A few states are also pursuing other services, such as residential treatment and clinical case management.

Thus, the District should consider strategies to address this priority area, including

- expanding the referral and intake process for substance abuse treatment to additional locations
- increasing marketing and outreach efforts
- increasing capacity for providing buprenorphine as a treatment option
- leveraging Medicaid funding.

Priority Area 4: Increase the coordination of care for individuals with comorbid mental health and substance abuse conditions.

Care for individuals with co-occurring mental health and substance abuse disorders is not well coordinated. In the District, APRA and DMH operate in separate silos. There is little communication between substance abuse and mental health providers caring for the same patient. In addition, systems for tracking individuals who use services through each agency are

not linked; neither are the systems that providers use to become credentialed or to bill for their services.

Strategies to improve coordination in the District might include

- establishing a unified credentialing system to allow providers with capabilities to serve mental health and substance abuse services to be dually credentialed by APRA and DMH in a streamlined process
- cross-training providers in both substance abuse and mental health assessment and treatment to increase the number of providers who can treat individuals with co-occurring disorders so that persons with dual diagnoses can obtain quality care in one locale
- developing a unified billing system in which providers can be reimbursed for mental health and substance abuse services through a central mechanism, a step which may also encourage providers to become dually certified
- developing a uniform consent form that consumers would sign at the time of initial presentation for behavioral services in order to allow information to be shared between substance abuse and mental health providers and help overcome the ambiguities associated with the privacy provisions of the Health Insurance Portability and Accountability Act (HIPAA).

Priority Area 5: Fundamentally upgrade the data infrastructure of the public behavioral health care system to allow for improved monitoring of service utilization, quality of care, and patient outcomes.

The District's data infrastructure is not sufficient for tracking services, monitoring quality, and following health outcomes. Data are vital to the District's ability to promote provider efficiency, improve care coordination within and across agencies, and ensure high-quality service. Key issues include the following:

- Databases maintained by DMH and APRA are not interoperable; there is no common identifier that allows for tracking individuals who use both systems.
- Until recently, APRA has had virtually no ability to consistently track individuals who use APRA services or to track service utilization more generally. New data systems hold the potential for vastly improved monitoring and tracking but need attention and investment to achieve their promise.
- Interoperability across databases within DMH is also limited. For example, it would be useful to track use of outpatient and inpatient services for given individuals over time, but the systems that track outpatient use (eCura) and inpatient services (Avatar) at St. Elizabeth's are not readily linkable. DMH has made progress in its ability to obtain and analyze claims data related to mental health for fee-for-service and MCO Medicaid enrollees, but a key next step is the ability to track service use for a specific Medicaid enrollee who receives care both through DMH and directly through Medicaid. Satellite DMH databases track various other services (e.g., housing, school mental health

services); integration of data across these various systems would allow DMH to track service provision and outcomes for specific patients in a comprehensive way.

- Many of the databases do not collect robust-enough information for strategic planning or performance measurement. For example, the school-based program contains students' names but little else in terms of the type of care delivered. Existing claims databases are not sufficient for tracking changes in the mental health or physical well-being of MHRS enrollees.
- As suggested in Priority Area 2, an opportunity exists for DMH to develop ways of identifying and tracking individuals with significant mental health disorders in Medicaid. Regular and systematic downloads of Medicaid claims from the Department of Health Care Finance (DHCF—the District's Medicaid agency) to DMH and consistent and timely analysis of those data are important first steps.
- Finally, regular tracking of the prevalence and incidence of behavioral health conditions through continued analysis of population-level surveys—NSDUH, NSCH, and BRFSS—is needed. The permanent addition of mental health screening questions to BRFSS should be considered.

In sum, our assessment points to these high-level priorities for the District:

- Work to reduce unmet need for public mental health care.
- Track and coordinate care for individuals in the public system with mental health diagnoses.
- Improve the availability and accessibility of substance abuse treatment services.
- Increase the coordination of care for individuals with comorbid mental health and substance abuse conditions.
- Fundamentally upgrade the data infrastructure of the public behavioral health care system to allow for improved monitoring of service utilization, quality of care, and patient outcomes.

Acknowledgments

This study would not have been possible without the cooperation and support of the leadership of the District of Columbia Department of Mental Health and Addiction Prevention and Recovery Administration. We especially thank Anne Sturtz, Steve Baron, Venida Hamilton, and Steve Steury at DMH; Shaun Snyder and Tori Fernandez Whitney at APRA; and Dave Chandra at the DC Department of Health Care Finance. We also thank representatives from the many organizations who contributed to this effort by participating in interviews, providing data or documents, and reviewing our work. (A full list of organizations is provided in Appendix E of this report). We gratefully acknowledge insightful reviews from Anita Chandra (RAND) and Susan Blake (George Washington University). Finally, we thank our RAND colleagues Natalia Weil, Adria Jewell, and Kevin Feeney for their help with data analysis and formatting of the report and Alison Evans Cuellar (George Mason University) for her assistance with the YRBS data.

Glossary and Abbreviations

Access to Recovery (ATR)—a discretionary grant program funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) aimed at expanding capacity, supporting client choice, and increasing the array of faith-based and community-based providers for clinical treatment and recovery support services

Addiction Prevention and Recovery Administration (APRA)—an agency housed in the Department of Health; responsible for substance abuse prevention, treatment, and recovery

Addiction Severity Index (ASI)—tool used to assess appropriate substance abuse treatment

ADHD—*see* hyperkinetic disorder.

Adolescent Substance Abuse Treatment Expansion Program (ASTEP)—allows adolescents access to a network of substance abuse treatment providers; overseen by the Addiction Prevention and Recovery Administration (APRA)

alcohol, tobacco, and other drug (ATOD)—term describing use of these substances

Alliance—*see* DC Healthcare Alliance.

American Society for Addiction Medicine Patient Placement Criteria (ASAM PPC)—criteria used by the Addiction Prevention and Recovery Administration (APRA) to help determine the appropriate level of care for all clients

assertive community treatment (ACT)—intensive, community-based mobile clinical services for adults who have been noncompliant with traditional outpatient services; overseen by the Department of Mental Health

autism spectrum disorder (ASD)

Avatar—database used to process transactions, including claims and authorizations; used by the Department of Mental Health (DMH)

Behavioral Risk Factor Surveillance System (BRFSS)—an annual telephone-based household survey of adults conducted by the Centers for Disease Control and Prevention (CDC) that collects information on self-reported health status and a variety of health and health risk behaviors

Centers for Medicare and Medicaid Services (CMS)—federal agency responsible for health care coverage of its beneficiaries

Central Detention Facility (CDF)—a facility that houses male inmates; overseen by the DC Department of Corrections

Child and Family Services Agency (CFSA)—District agency responsible for the protection of at-risk children and child victims; services include foster care

Children and Adolescents Mobile Psychiatric Program (ChAMPS)—24/7 emergency intervention program for youth, overseen by the Department of Mental Health and operated by Catholic Charities

Children’s National Medical Center (CNMC)—a pediatric hospital in the District

Choosing Options for Recovery and Empowerment Program (CORE)—the Access to Recovery program in the District of Columbia to provide culturally sensitive substance abuse treatment and recovery support services

community-based intervention (CBI)—intensive services for children and youth, designed to keep the child in the home; overseen by the Department of Mental Health (DMH)

Comprehensive Psychiatric Emergency Program (CPEP)—a program administered by the Department of Mental Health that provides 24/7 emergency psychiatric services for adults, including mobile crisis services and observation beds

Community Residential Facilities (CRF)—group homes in which people receive supervision 24 hours a day and seven days per week

Community Supervision Program (CSP)—the Court Services and Offender Supervision Agency’s (CSOSA) probation and parole system for adults in the District of Columbia

Co-Occurring State Incentive Grants (COSIG)—grants provided to states to develop their capacity to treat persons with co-occurring substance abuse and mental disorders

core services agency (CSA)—provider that contracts with the Department of Mental Health to provide mental health rehabilitation services

Correctional Treatment Facility (CTF)—medium security facility used to house female inmates; overseen by the DC Department of Corrections

Court Services and Offender Supervision Agency (CSOSA)—federal agency that performs offender supervision in coordination with the Superior Court of the District of Columbia and the U.S. Parole Commission

Court Urgent Care Center (CUCC)—a program for individuals in the criminal justice system, overseen by the Department of Mental Health

District’s Automated Treatment Accounting system (DATA)—a performance monitoring system in development by the Addiction Prevention and Recovery Administration (APRA) based on the Web Infrastructure for Treatment Services (WITS)

DC Community Services Agency (DC CSA)—a public agency that previously provided mental health rehabilitation services; the direct provision of most services by the DC CSA has been discontinued

DC Healthcare Alliance (Alliance)—a public program providing access to health care for eligible District residents

DC Housing Authority (DCHA)—a public agency that provides affordable housing to eligible District residents

Department of Corrections (DOC)—District agency responsible for the operation of the DC jail and other correctional facilities

Department of Disability Services (DDS)—District agency that provides services for people with disabilities

Department of Health Care Finance (DHCF)—the District’s state Medicaid agency; administers Medicaid fee for service program, Medicaid managed care organizations (MCOs), and the Alliance program

Department of Housing and Community Development (DHCD)—District agency responsible for affordable housing

Department of Human Services (DHS)—District agency that provides services for residents facing economic and social challenges

Department of Mental Health (DMH)—District agency responsible for providing emergency care and comprehensive mental health services and support to District residents in need of the public mental health system; also responsible for evaluating and treating individuals referred through the criminal justice system

Department of Health (DOH)—District agency responsible for the promotion and protection of health

Department of Youth Rehabilitation Services (DYRS)—District agency responsible for youth in the juvenile justice system

Diagnostic and Statistical Manual of Mental Disorders, IV (DSM-IV)—manual containing standard classification of mental disorders; contains diagnoses categorized into different levels, including Axis I and Axis II disorders

disproportionate share (DSH) payments—payments made to compensate hospitals that treat a large share of Medicare and low-income patients

District of Columbia—(the District, D.C.)

Drug Treatment Choice Program (DTCP)—the District’s adult substance abuse treatment program, administered through vouchers provided by the Addiction Prevention and Recovery Administration (APRA)

eCura—database used to process transactions, including claims and authorizations; used by the Department of Mental Health

freestanding mental health center (FSMHC)—offers behavioral health treatment under the supervision of a psychiatrist on a fee schedule.; services may be used by the general public, including the uninsured and people enrolled in Medicaid and the Alliance

Global Assessment of Individual Needs (GAIN)—a series of standardized measures to assess problems and service utilization related to adolescent substance use; utilized in the Addiction Prevention and Recovery Administration’s (APRA) Adolescent Substance Abuse Treatment Program (ASTEP)

Health Insurance Portability and Accountability Act (HIPAA)

HIV/AIDS, Hepatitis, STD, and Tuberculosis Administration (HAHSTA)—District agency housed under the Department of Health, responsible for the prevention of HIV/AIDS, hepatitis, STDs, and tuberculosis and providing services to persons with the diseases

Health Services for Children with Special Needs (HSCSN)—a special managed care plan for supplemental security income (SSI)—eligible children

Homeless Management Information Systems (HMIS)—software designed to collect data on the needs of the homeless

hyperkinetic disorder—a condition, commonly referred to as attention deficit-hyperactive disorder (ADHD), characterized by persistent traits of severe and pervasive inattentiveness, overactivity, and impulsiveness, beginning in the first five years of life.

Department of Housing and Urban Development (HUD)—federal agency responsible for affordable housing

Institution for Mental Disease (IMD)—an institution with more than 16 beds that provides care to persons with mental illness

managed care organization (MCO)—a health care delivery system that provides care through a network of providers for a predetermined monthly fee

Mental Health Rehabilitation Services (MHRS)—mental health services provided by the Department of Mental Health via the core services agencies (CSAs)

National Survey of Drug Use and Health (NSDUH)—an annual face-to-face household survey of individuals age 12 and older conducted by the U.S. Department of Health and Human Services’ Substance Abuse and Mental Health Services Administration (SAMHSA) that focuses exclusively on the use and abuse of illicit drugs and alcohol over the past month or year

National Survey of Children’s Health (NSCH)—a periodic, telephone-based household survey sponsored by the Maternal and Child Health Bureau of the U.S. Department of Health and Human Services

Public Use Microdata Area (PUMA)

Pretrial Services Agency (PSA)—the subdivision of the Court Services and Offender Supervision Agency (CSOSA) that is responsible for clients during the stage between lockup and arraignment and sentencing; PSA provides a number of services for clients with mental health and substance abuse issues

Psychiatric Institute of Washington (PIW)—a psychiatric hospital in the District

Residential Substance Abuse Treatment Program (RSAT)—a national program providing residential substance abuse treatment for inmates, funded through the Bureau of Justice Assistance, a department within the U.S. Department of Justice

School Mental Health Program (SMHP)—Department of Mental Health program that provides mental health services to youth in some District public and charter schools

Substance Abuse and Mental Health Services Administration (SAMHSA)—federal agency responsible for decreasing the impact of substance abuse and mental disorders

Substance Abuse Treatment Branch (SATB)—a branch in the Community Supervision Program (CSP) of the Court Services and Offender Supervision Agency (CSOSA); supervises offenders with mental health and substance abuse issues after release

severe emotional disturbance (SED)—term used to describe children experiencing emotional, behavioral, or mental disorders; defined by the Department of Mental Health as having a primary diagnosis on either AXIS I or AXIS II of the DSM-IV Manual or equivalent ICD-9 codes, excluding substance abuse or developmental disorders unless co-occurring

severe mental illness (SMI)—term used to describe adults experiencing mental disorders; defined by the Department of Mental Health as having a primary diagnosis on either AXIS I or AXIS II of the DSM-IV Manual or equivalent ICD-9 codes, excluding substance abuse or developmental disorders unless co-occurring

So Others Might Eat (SOME)—a community-based organization providing services to the poor and homeless residents of D.C.

Specialized Supervision Unit (SSU)—unit of the Court Services and Offender Supervision Agency (CSOSA) responsible for supervising adults with mental illness or developmental delay who have been arrested

Strategic Prevention Framework State Incentive Grant (SPF-SIG)—grants designed specifically to help states design and implement prevention models

Supplemental Security Income (SSI)—a federally funded program providing benefits to persons with disabilities

United Medical Center (UMC)—a hospital in the District

Web Infrastructure for Treatment Services (WITS)—a performance-monitoring system developed by the Substance Abuse and Mental Health Services Administration (SAMHSA)

Youth Risk Behavior Survey (YRBS)—a set of biennial school-based surveys used to monitor trends in risk behaviors among the nation's youth

1. Introduction

As a result of the tobacco litigation settlement reached in 1998, more than \$200 million was made available to the District of Columbia to invest in the health of the city's residents. In 2007, the District contracted with the RAND Corporation to study the health of District residents and the health care delivery system in the District and provide an informed assessment of policy options for improving the health care delivery system, including through the investment of the tobacco settlement funds. The findings from this work are summarized in two RAND reports (Lurie et al., 2008a, and Lurie et al., 2008b).

Community and provider focus groups were conducted as part of the RAND evaluation, and one of the resounding concerns that surfaced was access to health care services for mental health and substance abuse problems, also known as behavioral health problems. Primary care physicians in the District, for example, reported significant challenges finding specialty care for patients enrolled in Medicaid, including notably limited options for Medicaid patients with mental health problems. District residents pointed to substantial gaps in the availability of outpatient specialty care, and District parents reported that getting behavioral health care for their children was a daunting problem.

These findings and others pointed clearly to the need for more intensive study focused on behavioral health and health care in the District and, in particular, on the public behavioral health care system, given its predominant role in the delivery of services to District residents. In this study, we build on and extend previous analysis of health and health care in the District by

- characterizing the organization and financing of public behavioral health services in the District (Chapter 2)
- providing a richer understanding of the prevalence of mental health disorders and substance use among District residents (Chapter 3)
- tracking utilization of public behavioral health services among District residents (Chapter 4)
- reporting on key challenges that the District's public behavioral health care system faces, as identified by stakeholders (Chapter 5)
- summarizing key issues and developing recommendations for improving the District's behavioral health care system (Chapter 6).

Our approach blends quantitative and qualitative methods and utilizes data from a wide range of sources, including survey data, administrative data, claims data, and data from focus groups and stakeholder interviews. We primarily use survey data to estimate the prevalence of mental health disorders, substance use, and substance use disorders. We use administrative data to evaluate utilization of mental health care services among District residents, and we rely on stakeholder interviews and focus groups for information about the functioning of the behavioral health care system. Table 1.1 profiles key data sources.

Table 1.1: Key Data Sources

Type	Specifics	Dates	Description
Survey	Behavioral Risk Factor Surveillance System (BRFSS)	1999–2008	BRFSS is an annual telephone-based household survey of adults conducted by the Centers for Disease Control and Prevention (CDC) that collects information on self-reported health status and a variety of health and health risk behaviors. In 2006, many states, including the District of Columbia, added an optional mental health module to the annual survey. The module contained the eight-item Patient Health Questionnaire (PHQ-8), a screening tool for depression. The 2006 survey also asked respondents whether they had ever received a clinical diagnosis of either depression or anxiety disorder. While the mental health module was not repeated subsequently, questions about alcohol use have been included in the annual BRFSS survey for over a decade. The 2008 BRFSS survey included 4,243 respondents from the District and 406,749 respondents nationally.
Survey	National Survey of Drug Use and Health (NSDUH)	2001–2008	NSDUH is an annual face-to-face household survey of individuals age 12 and older conducted by the U.S. Department of Health and Human Services’ Substance Abuse and Mental Health Services Administration (SAMHSA) that focuses exclusively on the use and abuse of illicit drugs and alcohol over the past month or year. State-level results (including those for the District) are reported using two years of survey data to enhance the stability of estimates. The majority of our alcohol and drug use prevalence estimates came from this survey. Mental health conditions assessed by the survey include serious psychological distress in the past year (using the K6 Mental Health Screening Tool) and major depression in the past year (measured according to DSM-IV criteria). The 2007/2008 pooled NSDUH survey included 1,724 respondents from the District and 136,606 respondents nationally.
Survey	National Survey of Children’s Health (NSCH)	2007	NSCH is a periodic, telephone-based household survey sponsored by the Maternal and Child Health Bureau of the U.S. Department of Health and Human Services. The survey is administered to adult household members who answer questions about the physical, emotional, and behavioral health problems of a single, randomly sampled child age 17 and younger in each household. We used the 2007 wave of the NSCH survey to estimate rates of diagnosed depression, anxiety disorder, and a number of behavioral and developmental disorders. The survey does not contain items relating to substance abuse. The 2007 NSCH survey included 1,801 respondents from the District and 91,642 respondents nationally.
Survey	Youth Risk Behavior Survey (YRBS)	1997–2007	YRBS is a set of biennial school-based surveys used to monitor trends in risk behaviors among the nation’s youth. As part of the YRBS, the District conducts the DC Youth Risk Behavior Survey (YRBS) for children in grades 6–8 and grades 9–12. Because 2009 data were not available for analysis due to a poor response rate, we used the 2007 YRBS to estimate the prevalence of impaired functioning due to depression and the prevalence of suicidal thinking and plan-making among D.C. middle school and high school students. Similar to the NSDUH survey, the YRBS also asks about substance abuse involving a large number of drugs. Unlike the NSDUH survey, which measures drug and alcohol use in the past month or year, the YRBS mostly measures drug and alcohol use at any time in the past. The 2007 YRBS survey included 1,732 respondents from the District.

Survey	Homeless Enumeration for the Washington Metropolitan Region	2009	The Homeless Services Planning and Coordinating Committee of the Metropolitan Washington Council of Governments has conducted a regional enumeration of the homeless population since 2001. The population targeted by the committee includes people found on the streets, in emergency shelters, in transitional and permanent supportive housing, or who are otherwise homeless who are locally served by a Continuum of Care, as defined by the U.S. Department of Housing and Urban Development (HUD) under the McKinney-Vento Homeless Assistance Act, Continuum of Care Homeless Assistance Program. The enumeration provides a snapshot of persons served by the nine jurisdictions in the Washington, D.C., metropolitan region that have received funding through the HUD Continuum of Care Homeless Assistance Program.
Claims data	eCura	2008–2009	eCura is DMH’s electronic patient management and billing system. It contains information about service authorization plans for each enrollee, including the type of services and number of units for which each enrollee is eligible. CSAs also use eCura to electronically file claims for services delivered to MHRS enrollees. As part of their reporting requirements, CSAs must update several data fields in eCura on a quarterly basis, including each enrollee’s receipt of supportive services, changes in living arrangements, and use of inpatient psychiatric care.
Claims data	Medicaid managed care claims data	2007–2009	We obtained encounter data from four Medicaid managed care organizations (MCOs) operating in the District during fiscal years 2007–2009 (Amerigroup, Chartered, Health Right, and Unison), as well as the Alliance program, which is financed and operated by DHCF. Each dataset contains information on patient encounters in outpatient, inpatient, and emergency care settings.
Administrative data	DCHA hospital discharge data	2004–2008	We used data from the District of Columbia Hospital Association to assess utilization for people with mental health conditions who were discharged from any of the District’s emergency departments.
Stakeholder interviews	54 interviews with 81 people	August 2009–May 2010	We conducted interviews with a wide range of individuals and organizations to provide insight into the behavioral health safety net system in the District of Columbia. Interviewees included government employees from DMH, APRA, and DHCF, providers of mental health and substance abuse services, primary care providers, insurance company executives, representatives of hospitals, local nonprofit organizations, and researchers and experts on the delivery of behavioral health care
Focus groups	22 participants	February–March 2010	Two focus groups were conducted with District mental health and substance abuse providers.

2. Overview of the Public Behavioral Health Care System

This chapter provides an overview of the organization and financing of the public behavioral health care delivery system in the District of Columbia. The public behavioral health care system can be thought of as incorporating the provision of publicly funded health insurance coverage to individuals who have mental health or substance abuse conditions and the provision of publicly funded behavioral health care services to such individuals.

Three District of Columbia agencies have central roles in the behavioral health care system: DMH, DHCF, and APRA. DHCF has primary responsibility over public insurance programs, and DMH and APRA have purview over public mental health and substance abuse treatment services, respectively. Despite their distinct roles, the populations that these agencies serve overlap substantially. Organizationally, APRA is housed within the District's Department of Health (DOH). DOH, DMH, and DHCF are all cabinet-level agencies. By comparison, most states responding to a 2006 survey (40 out of 47 responding) reported having substance abuse services provided through the state's mental health agency or a single umbrella department that housed both substance abuse and mental health agencies (NRI, 2006).

The framework of the behavioral health care system in the District has been sharply influenced a number of lawsuits filed and the legal decisions consequent to them. In the 1970s, St. Elizabeth's—the sole public psychiatric hospital in the District—was the subject of a lawsuit by civilly committed patients to promote the deinstitutionalization of the mentally ill (now known as *Dixon et al. v Fenty et al.*).

In 1975, the court found that individuals had a right to treatment in the least restrictive setting. In the years following the case, the hospital was transferred from the federal government to D.C. oversight (1987) and placed under U.S. District Court–ordered receivership (1997) and a transitional receivership (2000). In 2001, the U.S. District Court adopted a final court-ordered plan that described an “overall policy framework for meeting the Dixon mandate to develop and implement an effective and integrated community-based system of mental health care for consumers in the District of Columbia” (Jones, 2001). In 2002, the receivership was terminated and a consent order was adopted in which a court monitor was appointed to ensure that the District was meeting agreed on standards (called the exit criteria) that provide a comprehensive summary of challenges facing DMH.

In addition, in 2007, St. Elizabeth's and the U.S. Department of Justice (DOJ) signed a settlement agreement in response to a lawsuit that set a time frame for implementing major changes to mental health care without acknowledgement of liability. These include developing integrated treatment planning; conducting routine mental health assessments; engaging in discharge planning activities; developing, revising, and implementing policies and protocols regarding the use of seclusion, restraints, and emergency involuntary psychotropic medications; and developing and implementing an integrated incident management system to address patient safety concerns.

In what follows, we provide an overview of the respective roles of each of the three agencies and remark on several key challenges; a companion document (Acosta et al., undated) provides an in-depth profile of each agency.

2.1. Department of Health Care Finance (DHCF)

The DHCF is a cabinet-level agency that administers the Medicaid and Alliance programs in the District. In this role, it determines what behavioral health care services are covered by these programs and sets reimbursement rates for services provided to individuals enrolled in Medicaid and the Alliance. We discuss each in turn.

Medicaid

Medicaid is a federally and locally funded health insurance program that primarily serves low-income and disabled individuals. Individuals who are disabled, including those who are disabled as a result of a severe and persistent mental illness, qualify for Medicaid if they are enrolled in the federal Supplemental Security Income (SSI) program.

Nationally, Medicaid programs have paid for an increasing share of mental health and substance abuse services over time: In 1987, Medicaid paid for one-third of state and locally administered mental health services. By 2002, it paid for roughly half of all such services (Buck, 2003). As a result, Medicaid has become one of the largest public payers of behavioral health care services. In 2004, over 55 percent of all mental health consumers in the United States had some of their care paid for by Medicaid (NRI, 2006). The largest users (in dollar amounts) of Medicaid mental health resources have been disabled beneficiaries, including people with severe and persistent mental illness (NRI, 2006).

States' Medicaid programs vary both in the scope of the services offered and in which populations are covered. Flexibility in federal Medicaid regulations enables states to set limits on services and to target covered services to persons with particular diagnoses as long as those limits are "sufficient in amount, duration, and scope to reasonably achieve its purpose" (Code of Federal Regulations, 1981). For example, a state can limit the number of prescriptions covered per month or the number of days covered in a residential facility. However, in contrast to private insurers, Medicaid does not place lifetime limits on coverage.

Medicaid is generally considered to provide more-comprehensive services for mental health compared to private insurers for children (Howell, 2004) and adults (Shirk, 2008). State Medicaid plans are required to cover psychiatrist services, acute inpatient hospitalizations, pharmaceutical services, nursing home care, and prescription drugs. States may choose whether to cover a number of other mental health services, including partial hospitalization, day treatment, psychotropic treatment, outpatient screening and rehabilitation, and case management services. Most states, including the District, have chosen to cover these options. Certain services are not covered by Medicaid, including vocational services, care coordination, and housing support services. In addition, the Institutions of Mental Disease (IMD) exclusion prohibits federal contributions toward medically necessary inpatient care for adults aged 21–64 who

receive care in a large psychiatric hospital. Medicaid will, however, reimburse for long-term psychiatric services institutions with fewer than 17 beds. In the District, Medicaid covers a wide range of mental health services, and the Medicaid formulary includes a number of psychotropic drugs.

In the District, Medicaid enrollees may be in one of several managed care plans or a fee-for-service (FFS) plan. Low-income, disabled adults are generally enrolled in Medicaid FFS; low-income disabled children are primarily enrolled in a special managed care plan (Health Services for Children with Special Needs [HSCSN]); and nondisabled Medicaid enrollees are usually enrolled in one of several other managed care plans.

Adult Medicaid enrollees who are disabled because of a severe mental illness generally receive care that is coordinated by the Department of Mental Health's Mental Health Rehabilitation Services (MHRS) program (described below), although they may also access mental health care services directly from providers who accept the District's Medicaid FFS plan. For severely mentally ill adults, the balance of responsibility among the District's public behavioral health services falls primarily on DMH. For children affected by a mental health disorder, HSCSN generally coordinates and manages care, under the oversight of DHCF.

The other Medicaid MCOs, which serve nondisabled Medicaid enrollees in the District, are responsible for the mental health care needs of their enrollees. DHCF oversees the managed care organizations, and DHCF has direct oversight of mental health care treatment for those in FFS Medicaid with less-severe mental health conditions. Medicaid enrollees falling into these groups may include, for example, a child in a low-income family with an anxiety disorder, a single parent in a low-income family experiencing dysthymia (a chronic mood disorder that is considered a form of chronic depression), and an adult enrolled in SSI for a physical disability but who has comorbid depression. Although there is some variation across MCOs, each MCO has a contract with DHCF that requires uniform set minimum benefits guaranteeing certain aspects of the delivery of care to their enrollees. The Medicaid MCOs are required to perform care coordination, both between primary and specialty care providers and with APRA for enrollees who need substance abuse treatment. Some of the MCOs in the District subcontract mental health care management to a managed behavioral health "carve-out" company that specializes in managing care for individuals with behavioral health care needs. These arrangements are described in a companion document (Acosta et al., undated).

As with mental health benefits, states have some discretion over the substance abuse treatment benefits that their state's Medicaid plan will cover. Among states that provide at least some coverage for substance abuse treatment, most provide inpatient detoxification, pharmacy, outpatient and inpatient services beyond detoxification, and methadone maintenance. Some states are pursuing Medicaid coverage for other services, such as residential treatment and clinical case management. In the District, however, substance abuse services are not covered for Medicaid enrollees, with the exception of medically necessary detoxification and outpatient services provided by APRA to children and youth.

DC Healthcare Alliance

The DC Healthcare Alliance (the Alliance) is a locally funded program that provides access to health care for low-income District residents who are ineligible for Medicaid. The Alliance is not, strictly speaking, a health insurance coverage program, but it functions in a similar way. All Alliance enrollees are enrolled in managed care. The Alliance has similar income requirements to Medicaid and offers a number of similar benefits, including primary care, some specialty care, and pharmaceutical coverage. Unlike Medicaid, it does not cover behavioral health care, and only a limited number of psychotropic drugs are part of the Alliance formulary. Many Alliance beneficiaries with mental health disorders are managed in the primary care setting with a limited drug formulary and very few options for referral.

With regard to substance abuse treatment, the Alliance program provides funding for life-threatening detoxification that is medically managed in an acute care hospital.

2.2. Department of Mental Health (DMH)

DMH engages in a wide range of activities that support prevention and promote resiliency and recovery among District residents with mental health disorders. The structure and operations of DMH were developed as part of the Mental Health Service Delivery Reform Act of 2001 and reflect requirements from the 2001 court-ordered final plan for the development and implementation of an effective and integrated community-based system of mental health care in the District.

Three key DMH responsibilities are (1) oversight over comprehensive outpatient services for individuals with severe mental illness through the Mental Health Rehabilitation Services (MHRS) program; (2) provision of crisis, emergency, and forensic mental health services; and (3) responsibility for a wide range of inpatient psychiatric services. We briefly describe each in turn.

MHRS: DMH's MHRS program provides a comprehensive set of outpatient treatment and other support services to District residents with severe mental illness. MHRS services include diagnostic and assessment services, community support services, and assertive community treatment, for example. Until recently, DMH both had oversight over core service agencies (CSAs) that contracted with DMH to provide MHRS services and was directly involved in service provision through government-run community service agencies. DMH began transitioning out of direct service provision in 2009.

Although DMH's MHRS program is available to severely mentally ill individuals regardless of insurance coverage, in practice the MHRS program primarily serves the people who have a disabling mental health disorder and are enrolled in both the SSI program and Medicaid. Approximately 70 percent of MHRS enrollees are SSI recipients, and the remainder are individuals who are uninsured or are enrolled in the Alliance. Conversely, some SSI enrollees with a disabling mental health disorder receive mental health treatment services outside of the

MHRS program through providers who accept their Medicaid plan, though it is difficult to estimate the size of this population.

MHRS services are paid for by federal and local dollars. For Medicaid enrollees, some MHRS services are covered by Medicaid (and thus paid for by a combination of local and federal funds). However, DMH has financial responsibility for MHRS services provided to Medicaid enrollees that are not covered by Medicaid and for all MHRS services provided to individuals not insured by Medicaid.

Crisis, Emergency, and Forensic Services: DMH is also responsible for mental health crisis, emergency, and forensic services. Key components of these services include the Comprehensive Psychiatric Emergency Program (CPEP), which offers adult crisis services and operates a mobile crisis van; the Children and Adolescent Mobile Psychiatric Service (ChAMPS); and the Court Urgent Care Center (CUCC), which provides crisis services through the D.C. judicial systems.

Inpatient Psychiatric Services: In terms of inpatient psychiatric services, DMH has two key roles. First, DMH is responsible for involuntary hospitalizations of District residents. DMH negotiates contracts with hospitals to care for involuntarily committed patients and helps to place all involuntarily committed patients. DMH also has financial responsibility for involuntarily committed District residents who are uninsured or who are enrolled in the Alliance. (The Alliance does not include mental health benefits). In some cases, DMH has financial responsibility for involuntary inpatient hospitalizations for Medicaid enrollees.

The second key inpatient mental health role DMH has is responsibility for staffing, operating, and overseeing the sole public psychiatric hospital in the District—St. Elizabeth’s Hospital. All of the District’s forensic hospitalizations occur at St. Elizabeth’s. Most people admitted civilly (either involuntarily or voluntarily) are transferred to St. Elizabeth’s after a 14-day inpatient mental health stay elsewhere. DMH is financially responsible for most inpatient hospitalizations to St. Elizabeth’s.

With regard to scale of effort, the DMH operating budget in fiscal year (FY) 2009 was \$231.7 million. Of the total FY 2009 budget, \$102.1 million was allocated to St. Elizabeth’s.

The court-ordered final plan for DMH delineates 19 specific performance targets that DMH must meet. These targets, known as the “Dixon exit criteria,” include measures of consumer satisfaction, consumer functioning, systems performance, service penetration, supported housing, supported employment, treatment availability, use of newer-generation medicines, services for the homeless, continuity of care, care for children in natural or home settings, leveraging of Medicaid funding, and community resources. As of July 2010, DMH had achieved sufficient progress on nine of the 19 Dixon exit criteria (Jones, 2010).¹ Additional progress was required before other criteria could be met, including for measures of systems performance for adult MHRS enrollees, the penetration rate of mental health care for District youth, use of supported employment, use of assertive community treatment (ACT), measurement of consumer

¹ The nine criteria on which the District had made sufficient progress include prescribing newer-generation medicines, use of Medicaid for financing MHRS services, community resources (60 percent of DMH expenses used for community services), penetration of mental health services to adults with severe mental illness (SMI), penetration of services for children/youth with severe emotional disturbance (SED), penetration of mental health services for adults with a mental health diagnosis, and children/youth with SED served in natural setting.

functioning, measures of systems performance for youth, availability of supported housing, and continuity of care (Jones, 2010). The court monitor's report to the court noted that the latter four categories were especially problematic (Jones, 2010). For example, consumer service reviews (CSRs) for a sample of youth MHRS enrollees indicated a systems performance "score" of 49 percent, compared to the performance target of 80 percent, reflecting consumer-identified problems with the formation of well-functioning and integrated service teams and a long-term vision for care. Notably, however, two larger youth service providers improved from the prior year. In addition, with regard to supported housing, DMH's goal is that individuals with severe mental illness have a choice in living in community-integrated settings, have flexible services matched to their needs, and have permanence in housing supports. Supported housing capacity is expected to increase as a result of a DMH partnership with the Department of Housing and Community Development (DHCD) to create an additional 300 housing units; nonetheless, the waiting list for supported housing, as of May 2010, was just over 1,000, and the average time on the waiting list was 28 months. The court monitor noted the need for critical evaluation of the ways in which housing is prioritized, allocated, and financed.

With regard to the performance of St. Elizabeth's Hospital, the DOJ, following its May 2010 site visit, noted progress but identified several areas of continued concern, such as too much focus on present symptoms, such as crisis management, and not enough on other factors, such as functional status and results of evaluations; a need to focus on discharge planning, barriers to discharge, and planning for community reintegration; quality of nursing assessments; and documentation for treatment decisions.

2.3. Addiction and Prevention Recovery Administration (APRA)

APRA is an agency operating within the DOH that has primary responsibility for substance abuse prevention, treatment, and recovery services. APRA provides substance abuse treatment through several programs. One is focused on adults—the Drug Treatment Choice Program (DCTP)—and the other on adolescents—the Adolescent Substance Abuse Treatment Expansion Program (ASTEP). In addition, the Choosing Options for Recovery and Empowerment (CORE) program is the primary vehicle through which recovery services (i.e., case management and social services, such as spiritual support groups, parenting services, etc.) and methamphetamine treatment services are provided for individuals who are newly sober to support them in maintaining their sobriety and improving their personal health.

As described in Section 2.1, Medicaid does not provide coverage for substance abuse services for adult District Medicaid enrollees. Rather, to obtain publicly funded substance abuse services, adult Medicaid enrollees, along with uninsured adults and those in the Alliance, must access a voucher system run by APRA. Generally, adults are assessed at APRA's headquarters and, after assessment, are provided a voucher for services that can be obtained from an APRA-certified provider. For adolescents, ASTEP provides access to substance abuse treatment services. ASTEP serves District residents up to 21 years of age. Adolescents can get both intake (assessment and referral) and treatment services at one of the three certified ASTEP providers in the city; they do not need to visit APRA's lone assessment center. Recovery services are funded through a \$10.6 million Access to Recovery grant from SAMHSA. On entry into the CORE program, a case manager is assigned to each client. The caseworker and the client jointly identify the types of

services that the client may need to work toward recovery. The CORE program currently has 30 active participating providers offering recovery services.

APRA also funds other substance abuse–related services. For example, APRA pays for inpatient detoxification. In total, APRA’s FY 2009 budget was \$46 million. The greatest expenditure was for adult treatment and recovery services.

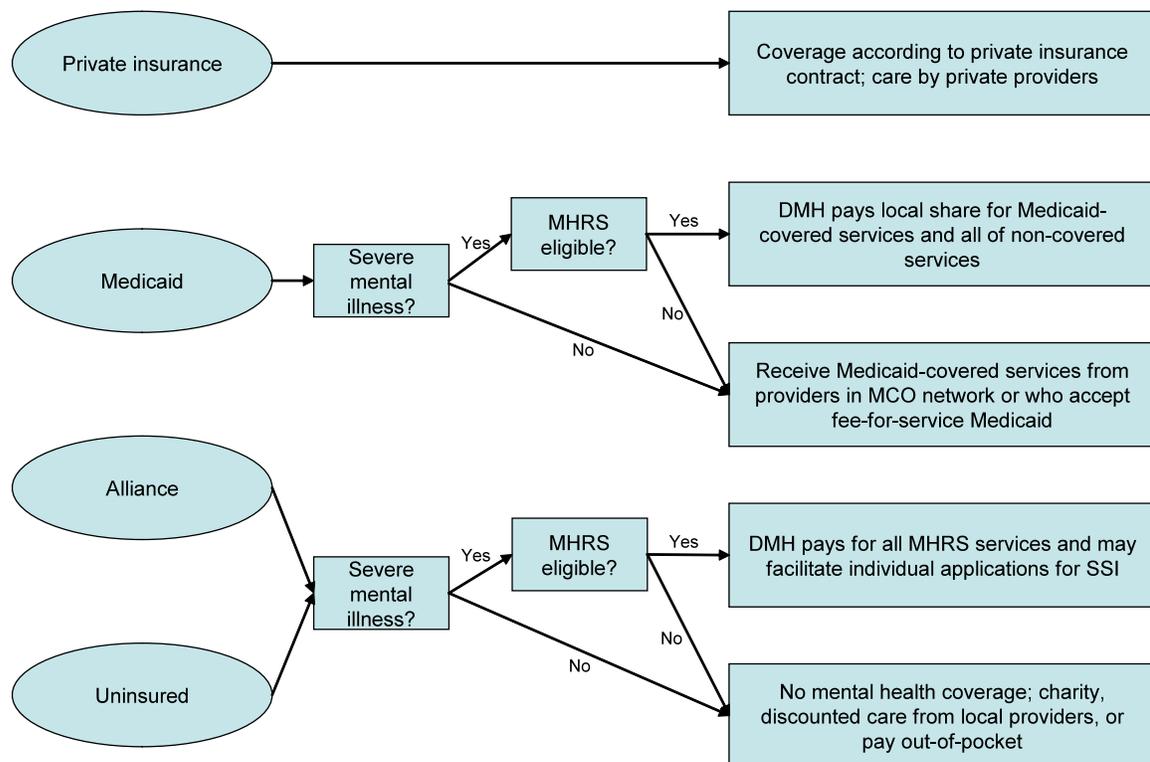
2.4. Overarching Challenges

The District’s behavioral health care system faces two fundamental challenges. The first is the limited availability of mental health care services for low-income populations with less-severe mental disorders, and the second is the limited coordination of care for individuals with co-occurring mental health and substance abuse disorders. We describe each in turn.

Like the “doughnut hole” in Medicare coverage for prescription drugs, there is a substantial gap in the public behavioral health care system in the District for individuals with less-severe and/or nondisabling mental health disorders who are not enrolled in Medicaid. The hole in the system exists because of the lack of a mental health benefit for Alliance enrollees and because there is little public funding in the District for treatment of nonsevere mental conditions for the uninsured. The bulk of DMH funding for mental health treatment services is for Medicaid enrollees with severe mental illness, which is consistent with national trends “tilting” public mental health care to Medicaid-covered people and services, thereby reducing funds available to low-income uninsured populations (Frank et al., 2003).

Figure 2.1 provides a simplified view of the availability and financing of outpatient mental health services for both severe mental disorders and other mental health disorders. It is worth noting that Medicaid enrollees with severe mental illness who may be MHRS-eligible may choose not to receive mental health service through MHRS and instead seek care directly from providers who accept Medicaid FFS or participate with their Medicaid managed care plan (not depicted).

Figure 2.1: Flow Diagram for Outpatient Mental Health Care Services by Insurance



As shown, individuals who are uninsured or are enrolled in the Alliance and who have mental health conditions that are not classified as severe are not entirely without options, although they are limited: They may seek charity care, obtain discounted care for their mental health condition from willing providers, or pay out of pocket for services if they are able.

Problems with access to mental health treatment services for less-severe mental health disorders are also an issue among Medicaid enrollees (even though they have insurance coverage for mental health treatment services). Providers and patients alike reported difficulty with access to specialty care, with providers noting that the lack of options for referral for mental health specialists was particularly challenging and parents reflecting that obtaining behavioral health services for conditions such as attention deficit disorder was a daunting problem (Lurie et al., 2008b).

The second key issue is the limited coordination of mental health and substance abuse treatment services for individuals with co-occurring disorders. Because neither Medicaid nor the Alliance provides independent access to substance abuse services for their enrollees, APRA is the central clearinghouse for all public substance abuse treatment services. (One exception is adolescent Medicaid enrollees, for whom some substance abuse treatment services are funded by Medicaid.)

A substantial fraction of individuals with mental health disorders have comorbid substance abuse issues. In the District, approximately 5,900 MHRs clients (roughly one in three) self-reported a co-occurring substance abuse disorder. Nationwide, an estimated 23 percent of persons with SMI have a co-occurring substance abuse disorder (SAMHSA, 2004). Yet, care for individuals with co-occurring mental health and substance abuse is not well coordinated in the District. Structurally, APRA and DMH operate in separate silos. As a consequence, systems for tracking individuals who use services through each agency are not linked, nor are systems that providers use to become credentialed or to bill for their services.

Some coordination of care for individuals with co-occurring disorders was achieved through the District's 2005–2008 Co-Occurring Disorders State Incentive Grant (COSIG). As a result of the COSIG grant, providers at St. Elizabeth's Hospital received training on how to screen and treat individuals with co-occurring disorders, and D.C. identified three community providers that had trained staff who could treat individuals with co-occurring disorders. Nonetheless, coordination of care between APRA and DMH for individuals with co-occurring mental health and substance abuse disorders has not happened in any systematic or sustained way.

3. Prevalence of Behavioral Health Disorders and Potential Unmet Need for Behavioral Health Care

For the District to be able to appropriately and strategically plan for its behavioral health system, foundational knowledge about the population’s behavioral health care needs and access to services is critical. To that end, we first describe in this chapter the prevalence of mental health disorders, substance use, and substance use disorders using the best data available. We then calculate potential levels of unmet need for specific types of mental health care in the District by comparing estimates of the prevalence of certain conditions with the corresponding number of individuals receiving services. We are unable to perform similar analyses to estimate potential unmet need for substance abuse treatment because there are no data on which to base estimates of the reach of APRA’s substance abuse treatment services. We were unable to obtain a data extract from APRA’s client management system, owing to its recent implementation, and historical data on service use were not collected systematically by the agency.

3.1. Prevalence of Behavioral Health Disorders

We estimated the prevalence of mental health disorders, substance use, and substance use disorders using the household- and school-based surveys described in Chapter 1 (Table 1.1). We describe current prevalence, remark on significant changes over time in prevalence where possible, and report ward-level prevalence estimates for a number of measures. Appendix A contains additional details on our analytic methods. In Appendix D, Tables D.1–D.6 provide confidence intervals for our estimates, and Figures D.1–D.10 display prevalence estimates for which we found statistically significant changes over time. Several of these results are drawn from a recent publication of trends in behavioral health disorders among D.C. middle school and high school students. We refer the reader to that publication for additional information, including analyses by gender and race/ethnicity (Blake et al., 2010a).²

Methodological Considerations

A general issue related to estimating prevalence for a localized area such as the District is the need for a sample of respondents that is sufficiently large to estimate prevalence precisely. Many nationally representative surveys lack sufficient sample size to make localized estimates. We chose surveys that had relatively large sample sizes for the District (compared to other surveys), but some of our estimates still have wide confidence intervals around them, indicating high levels of uncertainty. In addition, we were not able to estimate prevalence for particular groups of District residents (such as by ward) with much precision. We summarize our important findings in the next several sections and include the full set of ward-level results in Appendix B.

Other limitations of using survey data to estimate the prevalence of behavioral health conditions are well understood. First, both stigma associated with mental health conditions and concerns about the legal consequences of disclosing illicit drug use may bias prevalence estimates downward for these conditions. Second, not all mental health disorders are measured specifically

² Both the prevalence and trend estimates were obtained from D.C. public school youth only; behavioral risk prevalence for both D.C. public and public charter middle and high school youth can be found in a soon-to-be-released report (Blake et al., 2010b).

in these surveys (e.g., schizophrenia, bipolar disorder). Third, many measures are based on clinically validated screening instruments, which provide valid measures of the symptoms of each disorder but not the same level of detail or specificity as clinical interviews. Fourth, household and school-based surveys do not capture some populations for which behavioral health needs are likely to be substantial, such as the homeless, institutionalized populations, or children who infrequently attend school or who have dropped out altogether. In addition, the prevalence of severe disorders will be underestimated if individuals who are more severely ill are institutionalized, incapable of responding, or less likely to respond to the survey compared to others. Finally, differences in the design and administration of surveys, such as whether they are face to face or over the phone, can affect estimates.³

Despite their limitations, the survey-based estimates provide some basis for understanding the prevalence of behavioral health conditions across a representative sample of the District population. We supplement our estimates from these sources with other data. For example, we use published reports from local studies or survey efforts to estimate mental health and substance abuse prevalence among homeless and incarcerated populations. In the next three sections, we present prevalence estimates for mental health conditions, alcohol use and alcohol use disorders, and drug use and drug use disorders.

Estimated Prevalence of Mental Health Conditions

In Table 3.1 we present the most-current estimates of the prevalence of mental health conditions for noninstitutionalized adults and youth living in the District. Table D.1 provides confidence intervals associated with each District and U.S. estimate.

³ The BRFSS and NSCH are administered by telephone, and subjects are identified through random-digit dialing. The YRBS is a self-administered questionnaire, and the NSDUH survey uses face-to-face interviews. These differences may introduce systematic differences in prevalence rates. For example, the YRBS estimates for binge alcohol usage in the last month are almost twice as high as those reported by the NSDUH survey.

Table 3.1: Prevalence of Mental Health Conditions Among District Residents

		Age ^h	Source	Year	D.C. (%)	U.S. (%)
Adults						
Depression	Moderate or severe depression symptoms ^a	18+	BRFSS	2006	8.6	9.4
	Severe depression symptoms ^b	18+	BRFSS	2006	3.3	3.9
	History of diagnosed depression ^c	18+	BRFSS	2006	15.0	15.7
Anxiety	Major depressive episode in past year ^d	18+	NSDUH	2007	8.1	7.3
	History of diagnosed anxiety disorder ^c	18+	BRFSS	2006– 2006–	9.5*	11.3
Other	Serious psychological distress in past year ^e	18+	NSDUH	2007	11.5	11.1
	Severe mental illness ^f	18+	NSDUH	2002	9.5	8.3
Youth						
Depression	Major depressive episode in past year ^d	12–17	NSDUH	2007– 2008	7.2	8.2
	Depression symptoms index (mean) ^g	6–17	NSCH	2007	4.9	4.8
	Currently has diagnosed depression ^c	2–17	NSCH	2007	1.9	1.7
	Depression interferes with usual activity, prior 12 months	15–18	YRBS	2007	26.8	28.5
Anxiety	Currently has diagnosed anxiety disorder ^c	2–17	NSCH	2007	2.0	2.5
Suicidality	Seriously considered suicide in lifetime	12–14	YRBS	2007	23.9	–
	Seriously considered suicide, prior 12 months	15–18	YRBS	2007	14.9	14.5
	Made suicide plan in lifetime	12–14	YRBS	2007	13.1	–
	Made suicide plan, prior 12 months	15–18	YRBS	2007	12.1	11.3
	Attempted suicide, prior 12 months	15–18	YRBS	2007	12.2*	6.9
	Attempted suicide and sustained injury, prior 12 months	15–18	YRBS	2007	4.0*	2.0
Other	Attention deficit disorder or attention deficit hyperactive disorder ^c	2–17	NSCH	2007	4.3*	5.7
	Behavioral or conduct problems ^c	2–17	NSCH	2007	3.9*	2.9
	Autism or autism spectrum disorder ^c	2–17	NSCH	2007	0.3*	0.9
	Developmental delay problems ^c	2–17	NSCH	2007	3.6	2.8

SOURCES: NSDUH estimates from SAMHSA, 2010a; BRFSS estimates from Strine et al., 2008, and authors' own estimates; YRBS D.C. and national estimates from CDC, 2008.

NOTES: Asterisks indicate statistically significant differences between D.C. and U.S. estimates at $p=0.05$ or less.

^a PHQ-8 score ≥ 10 .

^b PHQ-8 score ≥ 15 .

^c Respondent or respondent's parent indicates that a doctor or other health care provider has diagnosed the condition.

^d A major depressive episode is defined as a period of at least two weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had symptoms that met the criteria for major depressive disorder as described in the DSM-IV.

^e K6 score ≥ 13 .

^f Severe mental illness was defined as having at some time during the past year a diagnosable mental, behavioral, or emotional disorder that met the criteria specified in DSM-IV and resulted in functional impairment that substantially interfered with or limited one or more major life activities.

^g This index is the sum score for three items: Individual feels worthless or inferior; Individual is unhappy, sad or depressed; Individual is withdrawn and does not get involved with others. Each is measured on a 5-point scale.

^h Age ranges reported for the YRBS estimates are approximate and reflect average ages for middle school and high school students.

Key Findings: Adults

Looking at lifetime experience among adult District residents, an estimated 15 percent of adult residents received a diagnosis of depression in their lifetimes, and 9.5 percent had a history of anxiety disorder. Both measures are of particular interest because prior diagnosis of depression or anxiety disorder is associated with an increased risk of experiencing future episodes. Approximately 9 percent had at least moderate depressive symptoms, and a similar percentage had a major depressive episode in the past year. Approximately 11.5 percent of adult residents reported having recent symptoms of serious psychological distress, and 9.5 percent had severe mental illness.

The prevalence of depressive symptoms and psychological distress among adults in the District was similar to the overall U.S. prevalence across nearly all measures. The only condition for which we found a statistically significant difference between the D.C. and overall U.S. prevalence was a history of anxiety disorder (9.5 percent in the District versus 11.3 percent nationally). While this finding could indicate a truly lower prevalence in the District, it could also reflect underdiagnosis of the condition; respondents were asked whether they had ever received a diagnosis of anxiety disorder from a doctor, not whether they had experienced symptoms in the past. Thus, if D.C. residents are generally less likely to receive care, they would also be less likely to be screened for anxiety disorder and to be diagnosed. In addition, racial bias in the diagnosis of mental health disorders toward more severe conditions (in particular, schizophrenia) may explain the lower prevalence of anxiety disorder vis-à-vis more-severe mental health disorders (Neighbors et al., 2003).

Available data show no statistically significant trends in the prevalence of depressive or anxiety disorders among District adults.⁴

In our ward-level analysis of mental health disorders (Table D.2) we found that the prevalence of severe depression symptoms was significantly lower in Ward 3 than the D.C. average (0.9 percent versus 3.1 percent), and the prevalence of moderate or severe symptoms was significantly lower in Ward 2 (4.2 percent versus 8.0 percent for the District overall). Lifetime diagnosis of depression was highest in Ward 1 (24 percent) compared to the District average of 15 percent, while in Ward 8, the prevalence of a lifetime diagnosis of depression (8.9 percent) and anxiety disorder (5.0 percent) were both lower than the D.C. average (15.0 percent and 9.5 percent, respectively). These lower rates of lifetime diagnosis might reflect underdiagnosis of these conditions for the reasons described above. Appendix C describes our ward-level analyses in greater detail and includes a map of the District's wards.

Key Findings: Youth

Approximately 1.9 percent of the D.C. youth population currently has diagnosed depression, and roughly the same percentage has diagnosed anxiety disorder. Approximately 7.2 percent of D.C.

⁴ Historical prevalence data for mental health conditions are not available from the BRFSS survey, and the two NSDUH survey items (severe psychological distress in the past year and major depressive episode in the past year) have been used in yearly surveys only since 2004 and 2005, respectively. We found no statistically significant changes in prevalence between 2004/2005 and 2007 for either condition (see Figures D.1 and D.2).

youth aged 12–17 have had a major depressive episode in the past year, based on DSM-IV criteria, while nearly 27 percent of high school students reported that depression interfered with their usual activities in the past year.⁵ The prevalence of depression and anxiety for District youth was statistically similar to the national youth population.

Among District high school students, 14.9 percent seriously considered suicide in the prior year, an estimate that is nearly identical to the national average (14.5 percent). District high school students were as likely as their national peers to report making suicide plans in the prior year (12.1 percent versus 11.3 percent). Among middle school students, prevalence of lifetime suicidal thoughts was 23.9 percent, and 11.3 percent reported ever making suicide plans. National estimates for this age group were not available for comparison. High school students living in the District had a significantly higher likelihood of attempting suicide than youth nationally (12.2 percent versus 6.9 percent) and were twice as likely to require medical care for injuries sustained during suicide attempts (4.0 percent versus 2.0 percent).

Approximately 4.3 percent of District youth aged 2–17 were reported to have diagnosed ADD or ADHD, a percentage that was statistically lower than the national average (5.7 percent). There is some chance that the true prevalence could be significantly higher or lower than 4.3 percent because of the inherent challenges diagnosing this condition. In particular, children with ADHD also have high rates of comorbid emotional, conduct, and learning problems, and ADHD symptoms differ by race, ethnicity, gender, and age (Cuffe, Moore, and McKeown, 2005). The reported prevalence of autism or autism spectrum disorder (ASD), 0.3 percent of children aged 2–17, was also lower than the U.S. average of 0.9 percent. D.C. youth were reported to have a higher prevalence of behavioral or conduct problems (3.9 percent compared with 2.9 percent among U.S. children overall). The prevalence of developmental delay problems among D.C. youth was not statistically different from the U.S. estimate (3.6 percent versus 2.8 percent).

Available evidence on trends over time in mental health disorders among District youth is limited.⁶ Prior analyses have shown that the prevalence of suicide attempts among District high school students has increased between 1997 and 2007 (Blake et al., 2010a) (Figure D.1).

Estimated Prevalence of Alcohol Use and Alcohol Use Disorders

In Table 3.2 we present estimates of the prevalence of alcohol use and alcohol use disorders for adults and children living in the District along with national estimates for comparison. Table D.3 contains confidence intervals for our District and U.S. estimates, and Table D.4 contains our ward-level estimates and their confidence intervals.

⁵ The latter estimate is not based on DSM-IV criteria; the definition of depression is open to interpretation by respondents.

⁶ Neither mental health nor developmental or behavioral conditions were assessed during the 2003 wave of the NSCH survey; most other questions have been included on the YRBS survey since 1997 and on the NSDUH since 2005. We found no significant changes between 2005 and 2008 on the lone NSDUH measure (major depressive episode in the past year), and only one significant trend from the YRBS data has been reported.

Table 3.2: Prevalence of Alcohol Use and Alcohol Use Disorders Among District Residents

	Age ^f	Source	Year	D.C. (%)	U.S. (%)
Adults					
Heavy alcohol use in past month ^a	18+	BRFSS	2008	6.3*	5.2
Binge alcohol use in past month ^b	18+	BRFSS	2008	17.9*	15.1
Binge alcohol use in past month ^b	18+	NSDUH	2007– 2008	31.7*	24.9
Alcohol dependence or abuse in past year ^c	18+	NSDUH	2008	10.0*	7.7
Needing but not receiving treatment for alcohol use in past year ^d	18+	NSDUH	2007– 2008	9.4*	7.3
Youth					
Alcohol use in past month ^e	15–18	YRBS	2007 2007–	32.6*	44.7
Binge alcohol use in past month ^b	12–17	NSDUH	2008	7.8	9.3
Binge alcohol use in past month ^b	15–18	YRBS	2007 2007–	12.1*	26.0
Alcohol dependence or abuse in past year ^c	12–17	NSDUH	2008	3.3*	5.1
Needing but not receiving treatment for alcohol use in past year ^d	12–17	NSDUH	2007– 2008	3.3*	5.0

SOURCES: NSDUH estimates from SAMHSA, 2010a; BRFSS estimates from NIAAA, 2009; YRBS D.C. and national estimates from CDC, 2008.

* Statistically significant differences between D.C. and U.S. estimates at $p=0.05$ or less.

^a Consuming 2 or more drinks per day (men) or 1 or more drinks per day (women) on average during the past month.

^b Consuming 5 or more drinks on at least one occasion during the past month.

^c Based on definitions found in DSM-IV.

^d Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

^e Respondent had at least one drink of alcohol on at least 1 day during the 30 days before the survey.

^f Age ranges reported for the YRBS estimates are approximate and reflect average ages for middle school and high school students.

Key Findings: Adults

Unlike patterns in the prevalence of mental health conditions, alcohol-related conditions were much more highly prevalent among District adults compared to the rest of the nation. Adult residents had a higher burden of illness on all five measures included in our household surveys. Heavy drinkers comprised 6.3 percent of the adult population, compared with 5.2 percent nationally, and the prevalence of binge drinking (defined as consuming five or more drinks on at least one occasion during the past month) ranged between 17.9 percent and 31.7 percent, based on the two surveys that captured this information, compared with 15.1 percent to 24.9 percent nationally.

Approximately 10 percent of the adult population screened positive for alcohol dependence or abuse in the past year, while the national prevalence estimate was only 7.7 percent. Among adults needing treatment for alcohol dependence or abuse, 9.4 percent reported that they were not receiving care in a specialized setting. This measure does not capture support services that these individuals might have received in nonspecialized settings.

Due to the high prevalence of alcohol use and alcohol use disorders among District adults compared to adults nationally, we explored the extent to which prevalence varied by gender. Among adults, binge drinking prevalence was a statistically significant 8 percentage points higher among male residents compared to female residents (22.5 percent versus 14.4 percent), although rates of heavy drinking were not statistically different (5.5 percent for men versus 7.1 percent for women).

In our trend analysis, the prevalence of both heavy drinking and binge drinking increased significantly between 1999 and 2003, to approximately 7.1 percent and 18.5 percent respectively, before declining between 2003 and 2007 (Figures D.2 and D.3). No other statistically significant changes over time were observed for alcohol dependence or abuse in the past year or for receiving inadequate treatment for alcohol use in the past year.

In our ward-level analyses (Table D.4), we found that alcohol use and alcohol use disorders were more highly prevalent in Wards 1, 2, and 3, comprising mainly affluent residents, and were below the District average in Wards 5 and 7. Rates of heavy drinking were above average in Wards 2 and 3 (10.1 percent and 9.2 percent versus 5.3 percent on average across the District) and lower in Wards 5 and 7 (2.6 percent and 0.8 percent, respectively). The prevalence of binge drinking was highest in Wards 1 and 2, while residents of Wards 4, 5, and 7 had lower rates on average. We found no significant differences between wards in either the prevalence of alcohol dependence or abuse in the past year or in the prevalence of inadequate treatment for residents with alcohol dependence or abuse disorders.

Key Findings: Youth

The prevalence of alcohol use and alcohol use disorders among District youth followed a distinctly different pattern from that of adults. Whereas adult residents were more likely to have alcohol-related risk behaviors or disorders than adults nationally on all measures, D.C. youth had a *lower* prevalence of alcohol-related conditions than the national average on four of five measures taken from two different surveys.

Among District high school students, nearly 33 percent reported consuming one or more drinks in the past month, compared to 45 percent of high school students nationally. D.C. youth also reported lower levels of binge drinking and alcohol dependence or abuse in the past year and fewer problems receiving treatment for their condition, compared to the national average. Approximately 7.8 percent of District youth engaged in binge drinking (12.1 percent among high school students), compared to 9.3 percent nationally (26 percent among high school students nationally). Slightly more than 3 percent of youth were dependent on or abused alcohol, and a similar percentage reported not receiving specialized treatment despite having an alcohol dependence or abuse disorder. We found no statistically significant gender-related differences in prevalence in alcohol use disorders among high school students.

Trends in alcohol use among the District's youth population decreased significantly between 1997 and 2007 according to two measures. Among high school students, alcohol use in the past month decreased from 37.7 percent to 32.6 percent over this period (Figure D.4), and there was a statistically significant decrease in binge alcohol use from 18.3 percent to 12.1 percent (Blake et al., 2010a) (Figure D.5).⁷

Estimated Prevalence of Drug Use and Drug Use Disorders

In Table 3.3 we present estimates of the prevalence of drug use and drug use disorders for adults and children living in the District obtained from each survey along with national estimates for comparison. Tables D.5 and D.6 contain confidence intervals for our District estimates and ward-level estimates, respectively.

⁷ A measure of binge alcohol use from the NSDUH survey did not show a similar pattern, however.

Table 3.3: Prevalence of Drug Use and Drug Use Disorders Among District Residents

	Age	Source	Year	D.C. (%)	U.S. (%)
Adults					
Illicit drug use in past month ^a	18+	NSDUH	2007– 2008	12.2*	7.9
Marijuana use in past month	18+	NSDUH	2007– 2008	9.8*	5.9
Illicit drug use other than marijuana in past month ^a	18+	NSDUH	2007– 2008	4.6	3.5
Cocaine use in past year	18+	NSDUH	2007– 2008	4.5*	2.3
Nonmedical use of prescription pain relievers in past year	18+	NSDUH	2007– 2008	3.8	4.7
Illicit drug dependence or abuse in past year ^{a,b}	18+	NSDUH	2007– 2008	4.5*	2.6
Needing but not receiving treatment for illicit drug use in past year ^{a,c}	18+	NSDUH	2007– 2008	3.7*	2.3
Youth					
Illicit drug use in past month ^a	12–17	NSDUH	2007– 2008	11.0	9.4
Illicit drug use other than marijuana in past month	12–17	NSDUH	2007– 2008	4.3	4.5
Nonmedical use of prescription pain relievers in past year	12–17	NSDUH	2007– 2008	4.1*	6.6
Marijuana use in past month	12–17	NSDUH	2007– 2008	7.2	6.7
Cocaine use in past year	12–17	NSDUH	2007– 2008	0.6*	1.4
Illicit drug dependence or abuse in past year ^{a,b}	12–17	NSDUH	2007– 2008	3.8	4.5
Needing but not receiving treatment for illicit drug use in past year ^{a,c}	12–17	NSDUH	2007– 2008	3.8	4.2
Ever used marijuana	12–14	YRBS	2007	17.9	–
Ever used marijuana	15–18	YRBS	2007	40.4	38.1
Ever used cocaine/crack	12–14	YRBS	2007	5.2	–
Ever used cocaine/crack	15–18	YRBS	2007	6.2	7.2
Ever used inhalant ^e	15–18	YRBS	2007	10.1*	13.3
Ever used heroin	15–18	YRBS	2007	5.4*	2.3
Ever used methamphetamines	15–18	YRBS	2007	6.1	4.4
Ever used Ecstasy	15–18	YRBS	2007	7.7	5.8
Ever used illegal steroids	15–18	YRBS	2007	6.5*	3.9
Ever injected illegal drug ^f	15–18	YRBS	2007	5.5*	2.0
Marijuana use in past month	15–18	YRBS	2007	20.8	19.7
Cocaine use in past month	15–18	YRBS	2007	3.6	3.3

SOURCES: NSDUH estimates from SAMHSA, 2010a; YRBS D.C. and national estimates from CDC, 2008.

* Statistically significant differences between D.C. and U.S. estimates at $p=0.05$ or less.

^a Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

^b Based on definitions found in DSM-IV.

^c Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

^e Respondent sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during his or her life.

^f Used a needle to inject any illegal drug into his or her body one or more times during his or her life.

Key Findings: Adults

The prevalence of drug use and drug use disorders among adult residents of the District follows patterns similar to those for alcohol abuse. On five of seven measures we found that adult residents had significantly higher prevalence of drug-related risk behaviors or disorders than the U.S. average. Household surveys indicate that 12.2 percent of District adults used some form of illicit drugs in the past month, compared to 8 percent nationally, the most common of which was marijuana (9.8 percent of District adults, compared to 5.9 percent nationally). Estimates of cocaine use in the past year were also higher than the national average (4.5 percent versus 2.3 percent). Adult residents were more likely to screen positive for illicit drug dependence or abuse according to DSM-IV diagnostic criteria (4.5 percent versus 2.6 percent nationally), and were more likely to report receiving inadequate drug abuse treatment in specialized settings (3.7 percent versus 2.3 percent nationally).

In our trend analysis, we found no significant changes in prevalence between 2002 and 2008 for any of these conditions. We found no statistically significant ward-level differences in prevalence of drug use or abuse (Table D.6).

Key Findings: Youth

District youth reported higher than average prevalence of some forms of drug use but a lower prevalence of others, and different surveys produced distinct patterns, complicating the interpretation of these findings. The YRBS tends to show that District youth have higher than average levels of illicit drug use, while the NSDUH survey indicates that the prevalence of drug use is no different from or even lower than the U.S. average. More detailed analyses of longitudinal trends in the District's YRBS data are available elsewhere (Blake et al., 2010a).

Eleven percent of youth reported using an illicit drug in the past month; 7.2 percent had used marijuana in the past month, while 4.3 percent had used an illicit drug other than marijuana. None of these results were significantly different from the national average. Prevalence of nonmedical use of pain relievers in the past year and cocaine use in the past year among District youth were both statistically lower than the national average. Among D.C. youth, 4.1 percent reported using prescription pain relievers for nonmedical uses, and 0.6 percent reported using cocaine in the past year, compared to national estimates of 6.6 percent and 1.4 percent, respectively. District high school students were more likely to have used heroin (5.4 percent), to have used steroids (6.5 percent), and to have injected any type of illicit drug (5.5 percent). District high school students were significantly less likely to use inhalants (10.1 percent versus 13.3 percent nationally). Prevalence estimates among high school students that were not

statistically different from the national average included use of marijuana in the past month (20.8 percent); cocaine use in the past month (3.6 percent); and lifetime use of marijuana (40.4 percent), cocaine/crack (6.2 percent), methamphetamines (6.1 percent), and ecstasy (7.7 percent).

Among middle school students, 17.9 percent had ever used marijuana and 5.2 percent had ever used cocaine/crack, but we were unable to identify national benchmarks for this age group.

Unlike for adults, prevalences of illicit drug dependence or abuse in the past year (3.8 percent) and inadequate drug abuse treatment (3.8 percent) among District youth were not statistically different from national averages (4.5 percent and 4.2 percent, respectively).

Statistically significant trends in the prevalence of several drug use or abuse conditions were found according to one survey but no significant trends from another.⁸ Lifetime use of marijuana among middle school students and high school students and use of marijuana in the past 30 days among high school students decreased over the past decade (Figures D.6–D.8). Lifetime marijuana use decreased from 27.6 percent to 17.9 percent between 1997 and 2007 among middle school students and from 51.5 percent to 40.4 percent among high school students. Use of marijuana in the past 30 days decreased by a similar amount for District high school students (29.3 percent to 20.8 percent over the decade). Lifetime use of injection drugs increased from 2.7 percent to 5.5 percent over the same period (Figure D.9). Finally, steroid use increased from 3.6 percent to 6.5 percent over the decade (Figure D.10).

Estimated Prevalence of Behavioral Health Conditions Among the Incarcerated and Homeless Populations

The prevalence estimates for adults and youth in the previous sections reflect the household and/or school populations in the District and do not include, for example, incarcerated or homeless individuals. Because both of these populations may have relatively high levels of behavioral health need and the size of each population is not insignificant, ignoring them may cause us to underestimate the prevalence of behavioral health disorders for the District as a whole. In what follows, we describe each population and present information about likely levels of behavioral health need.

The average daily population in D.C. detention facilities was 3,012 inmates in 2008, although most inmates stay for a relatively short period of time (Minton and Sabol, 2009). Approximately 10 percent of male and 2 percent of female inmates stayed longer than a year, while most inmates stayed for less than 3 months (Marzban, 2009). According to a D.C. Department of Corrections (DOC) assessment that included 3,184 inmates in August 2009, 20.2 percent had at least one mental health condition (Brown and Lesansky, 2010). Nearly 26 percent of inmates were substance abusers, and 10.2 percent had co-occurring mental health and substance abuse disorders. By comparison, national surveys assessing the mental health of inmates report that between 6 percent and 15 percent of those in city and county jails and between 10 percent and 15 percent of those in state prisons have a severe mental illness (Lamb and Weinberger, 1998). According to one systematic review, an estimated 25 percent of male and 45 percent of female

⁸ All significant findings were from the YRBS study and reported in Blake et al., 2010a. No significant changes over time were found on the NSDUH survey.

detainees in the United States had a substance abuse disorder (Fazel, Bains, and Doll, 2006). Rates of nonsevere mental health disorders among the incarcerated population, including depression and anxiety disorders, are likely to be substantially higher than in the general population.

We were unable to find data on the prevalence of behavioral health conditions among children housed within the District's juvenile justice system or who have dropped out of school. While the absolute size of this population is likely to be small, the prevalence of behavioral health conditions is likely to exceed the District average.

The District has one of the highest rates of homelessness in the United States. In 2009, approximately 6,200 persons (1.1 percent of the total District population) were homeless, including nearly 1,400 children (Homeless Services Planning and Coordinating Committee, 2009). Almost a third of all homeless persons were chronically homeless, defined as being continuously homeless for a year or more or having at least four episodes of homelessness in the past three years.⁹ Available data suggest that 21.1 percent of adult homeless residents of the District have severe mental illness (less than 2 percent among homeless children) and 34.2 percent have a substance abuse disorder (less than 1 percent among homeless children). About 10.5 percent of homeless adults have co-occurring severe mental illness and substance abuse disorders. Prevalences of behavioral health disorders among the District's homeless population are comparable to national estimates. Nationally in 2008, 26 percent of sheltered homeless people had a severe mental illness, and 37 percent had a chronic substance use issue (SAMHSA, 2010). Between 10 percent and 20 percent of homeless residents nationally have severe mental illness with co-occurring substance abuse disorders (Zerger, 2002).

3.2. Potential Levels of Unmet Need for Mental Health Care

In this section, we develop rough estimates for potential levels of unmet need for specific kinds of mental health care services through the public system. Our goal in these analyses is relatively narrow; we estimate only the size of the population who may need a specific service and compare it to the number of individuals who appear to be receiving the service. We do not address whether the level of service or quality of care is optimal. In addition, our analyses assume that individuals served by the system are those in the target population, although that may not be universally true. Ideally, estimates of unmet need in the District's public system would be benchmarked against other payers or other regions, but these estimates are not readily available.

We only focus on mental health services in this section. We are unable to perform similar analyses to estimate potential unmet need for substance abuse treatment because there are no data on which to base estimates of the reach of APRA's substance abuse treatment services.

⁹ The report used the Department of Housing and Urban Development (HUD) definition of homelessness, "persons who reside in some form of emergency or transitional shelters, domestic violence shelters, runaway youth shelters, and places not meant for human habitation, which include streets, parks, alleys, abandoned buildings, and stairways."

MHRS Services for Adults

The MHRS program is designed to serve individuals with severe mental illness. While there is no income limit for eligibility, the program primarily serves low-income individuals. The adult target population for this program can be calculated as the product of three terms:

MHRS adult target population	=	476,000	x	29%	x	11.9% [15.4%]
		(Number of adults in the District)		(Percentage of adults insured by Medicaid, enrolled in the Alliance, or uninsured)		(Prevalence of severe mental illness among uninsured [publicly insured] adults)

The size of the adult population in the District (18 and over) is approximately 476,000 (U.S. Census Bureau, 2009). Recent estimates indicate that among the adult population in the District, approximately 29 percent are either uninsured or publicly insured (Ormond, Palmer, and Phadera, 2010). Thus, the adult population of publicly insured or uninsured individuals is approximately 120,000 (the product of the first and second terms). While the District prevalence of SMI among adults is 9.5 percent (not statistically different from the national average of 8.3 percent), nationally, prevalence is higher among the uninsured and publicly insured (11.9 percent and 15.4 percent, respectively) (see Chapter 2). We use the latter two percentages in our calculations to better reflect the low-income population served by MHRS. Applying these latter two percentages to the adult uninsured or publicly insured population yields a target population of between 16,000 and 21,000 adults.

MHRS currently serves approximately 17,000 individuals; roughly one-fourth are children, and the remainder (approximately 13,000) are adults. Comparing the 13,000 adults in MHRS to the target population suggests a potential gap of several thousand individuals with SMI not served through MHRS. Because our estimates of SMI prevalence reflect only the household population and because the District has a large homeless population in which SMI rates are likely to be higher, the size of the MHRS target population might be underestimated. However, some of these individuals may be enrolled in SSI and may be receiving care through Medicaid FFS. We were unable to obtain claims data for the FFS program and cannot estimate the size of this population. Nonetheless, the size of the gap suggests that, even after accounting for the Medicaid FFS population receiving care outside of MHRS, some individuals who are uninsured, in the Alliance, or in Medicaid managed care may have severe mental health needs but have not yet connected to the MHRS program.

Services for Children with Severe Mental Health Conditions

Children with severe mental health conditions are primarily served through HSCSN, although some children are also served through MHRS. If we consider the target population for HSCSN or MHRS treatment services for severe mental health conditions to be low-income children who are

either uninsured or publicly insured who have a severe mental health condition, we can estimate the size of the target population as follows:

$$\begin{array}{l}
 \text{Target population for} \\
 \text{children with severe} \\
 \text{mental health conditions}
 \end{array}
 =
 114,000
 \times
 48\%
 \times
 \text{unknown}$$

(Number of children in the District)

 (Percentage of children insured by Medicaid, enrolled in the Alliance, or uninsured)

 (Prevalence of severe mental illness among uninsured and publicly insured children)

In 2009, there were approximately 114,000 District youth (County Characteristics Resident Population Estimates File, 2009). Approximately 48 percent of District children are either uninsured or publicly insured (Ormond et al., 2010). The product of these two terms is approximately 55,000. However, we do not have good estimates for the prevalence of severe mental health conditions for the target population in the District or elsewhere.

In 2008, HSCSN served approximately 3,500 children who had a disabling condition (physical or mental). Table 3.4 shows the range of mental health diagnoses among children served by HSCSN. Hyperkinetic disorder and developmental delay were the two most common qualifying diagnoses, representing 45 percent of enrollees. Qualifying diagnoses of behavioral, mood, and adjustment disorders were much less common.

Table 3.4: Children with Qualifying Mental Health Diagnoses Served by HSCSN

Qualifying Diagnosis	N	Percentage of HSCSN Enrollees
Hyperkinetic disorder ^a	801	22.9
Developmental delay	777	22.2
Mental retardation	231	6.6
Pervasive development disorder (including autism and psychosis)	175	5.0
Episodic mood disorders	129	3.7
Emotional disturbance	122	3.5
Conduct disorder	56	1.6
Adjustment disorder	49	1.4
Other mental retardation	42	1.2
Depressive disorder	42	1.2

NOTE: Analysis is based on qualifying diagnoses for children in HSCSN enrolled at any time during FY 2007 and FY 2008. Only mental health and developmental disorders are reported. Percentages reflect the fraction of the HSCSN-enrolled population with each qualifying diagnosis.

^a Also referred to as ADHD.

Excluding developmental delays and mental retardation, 1,374 children with disabling mental health conditions were served by HSCSN. This represents approximately 2.5 percent of the 55,000 District children who are enrolled in Medicaid or are uninsured. However, some children who are not enrolled in HSCSN may receive services through MHRS; we do not have an

estimate of the size of this population.¹⁰ Because we lack both a firm number of children served and a reliable estimate of the prevalence of severe mental health conditions among District children who are uninsured or publicly insured, the potential gap between the population with need and the population served remains uncertain.

Mental Health Care Services for Depression

We focus on one condition—depression—and we consider two populations: individuals enrolled in Medicaid managed care programs (other than HSCSN) and individuals who are either uninsured or enrolled in the Alliance.

Medicaid Managed Care Enrollees

For Medicaid managed care enrollees, the adult and adolescent target populations who potentially need mental health care for depression can be calculated as follows:

Number of adult (adolescent) Medicaid MCO enrollees with depression	=	33,000 [20,300]	x	8.1% [7.2%]	x	1.67 [0.95]
		(Number of adults [adolescents] enrolled in Medicaid MCOs in the District)		(Prevalence of depression among adults [adolescents] in the District)		(Adjustment factor for depression prevalence among adult [adolescent] Medicaid MCO enrollees relative to nonenrollees) ¹¹

We estimate the size of the Medicaid managed care population in 2009 to be 33,000 adults, 20,300 youth ages 12–17, and 63,600 children aged 16 and under.¹² In the next column we multiply by the overall depression prevalence in the District for each age group (8.1 percent for adults and 7.2 percent for adolescents; see Table 3.1). We then apply an adjustment factor that accounts for both the relative prevalence of each condition among Medicaid enrollees (versus nonenrollees) using national surveys and the disproportionately higher ratio of Medicaid enrollees in the District compared to the overall U.S. population. This calculation suggests that roughly 4,500 adults and 1,400 adolescent enrollees, or 5,900 enrollees total, may have depression. Because of the uncertainty in this calculation, we include a lower bound for our prevalence estimates using the overall depression prevalence estimate in the District for adults and adolescents (excluding the adjustment factors). These results suggest that only 2,700 adults and 1,500 adolescent enrollees, or a total of 4,200 enrollees in Medicaid MCOs, are likely to have depression.

¹⁰ The data suggest that approximately 40 percent of children in MHRS are under the care of the Child and Family Services Agency (CFSA, i.e., foster care); the remainder are ostensibly children with severe mental illness who may or may not also be served by HSCSN.

¹¹ According to the 2008 NSDUH survey, 12.8 percent of adults reported a major depressive episode in the past year, compared to 6.4 percent of non-Medicaid adults. Among adolescents, 8.0 percent of Medicaid/State Children’s Health Insurance Program (SCHIP) enrollees nationally reported a major depressive episode in the past year, compared to 8.5 percent of adolescents without Medicaid/SCHIP coverage. 20 percent of District residents are Medicaid enrollees versus 8.2 percent nationally.

¹² We developed estimates of the size of the District’s Medicaid MCO population by age by using information from earlier research (Lurie et al., 2008a) and a 2009 estimate of the total size of the MCO population estimate (96,639).

To determine how many Medicaid managed care enrollees received care for these conditions, we analyzed claims data from the three managed care organizations. We developed estimates of the number of individuals who received services that were associated with depression by looking for any claim during the year that had a relevant diagnosis. This approach may underestimate the true number of individuals with mental health disorders who receive services. This is because individuals with mental health disorders tend to present with multiple complaints, and mental health diagnoses might be underreported. On the other hand, this estimate may overstate the true number if individuals with these diagnoses did not, in fact, receive care for the condition (e.g., they received care for some other condition but the diagnosis was noted on the claim).

We find that 1,055 MCO adult enrollees and 636 youth enrollees (391 between the ages of 12 and 17) had some utilization associated with a diagnosis of depression during the course of a year. This suggests that there is a substantial level of unmet need for care for depression among adult Medicaid managed care enrollees; potentially as many as 60 percent of adults and 72 percent of adolescent enrollees with depression may lack treatment for their condition.

Uninsured and Alliance

The equation below can be used to estimate the size of the population of adults and adolescents in the District who are either uninsured or in the Alliance and who have depression.

Number of uninsured adults or adolescents with depression	=	415,000 [37,000]	x	7.9% [3.2%]	x	15.5% [6.9%]
		(Number of nonelderly adults [adolescents] in the District)		(Percentage of nonelderly adults [adolescents] who are uninsured)		(Prevalence of depression among uninsured adults [adolescents] in the District)

There are approximately 415,000 nonelderly adults and 37,000 adolescents living in the District (County Characteristics Resident Population Estimates File, 2008). Nearly 7.9 percent of nonelderly adults and 3.2 percent of adolescents are uninsured (Ormond, Palmer, and Phadera, 2010).¹³ Approximately 46,000 nonelderly adults are enrolled in the Alliance program and have no outpatient mental health coverage. These data suggest that 79,000 adults and 1,200 adolescents lack mental health coverage. In prior work assessing the needs of uninsured adults in Montgomery County, Maryland, in 2008, we documented prevalence estimates of self-reported depression of 15.5 percent (Gresenz et al., 2009).¹⁴ The prevalence of depression among Alliance enrollees has not been published previously, but we assume it is similar to that of the uninsured. We assume that uninsured adolescents have a rate of depression that is similar to the Medicaid

¹³ Ormond, Palmer, and Phadera estimate that 36,744 nonelderly adults and children were uninsured in the District in 2009.

¹⁴ Estimate is based on self-reported data by enrollees of the Montgomery Cares Program.

(adolescent) population, given the similarity of sociodemographic characteristics between these groups.

In total, we estimate that approximately 12,000 adults and adolescent residents of the District who are uninsured or in the Alliance have depression. Because these individuals may access mental health care services from many different providers, including federally qualified health centers (FQHCs) and freestanding mental health clinics (FSMHCs), and because they either receive charity care or pay out of pocket, it is difficult to obtain information on the number who are receiving mental health services. The key concern is whether the patchwork system of care available through volunteer mental health providers at clinics and the care available through the limited FSMHCs and through self-pay is sufficient to meet the behavioral health care needs of these 12,000 individuals, as well as other individuals who are uninsured or in the Alliance who have various other types of mental health disorders.

3.4. Summary

Our analyses suggest the following key findings:

Prevalence of Behavioral Health Disorders

- The prevalence of mental health conditions in the District resembles patterns nationally, among both adults and youth. One exception is that D.C. youth appear to have a higher percentage of parent-reported behavioral problems compared to children nationally.
- Suicide attempts among District high school students are more common than among high school students nationally, and prevalence appears to be rising in the District. Among high school students who attempt suicide, District youth are twice as likely to require medical care because of an injury.
- District adults have a higher burden of illness on measures of heavy drinking, binge drinking, alcohol dependence, and inadequacy of treatment. Binge alcohol use and heavy alcohol use increased over the last decade, although the trend has reversed somewhat between 2003 and 2008.
- District youth are less likely to use or abuse alcohol across several measures than children nationally, and alcohol use and binge drinking have decreased over the past decade.
- District adults had a higher prevalence of drug use and drug use disorders than the national average on five of seven measures, including higher percentages of marijuana use, cocaine use, and illicit drug dependence or abuse.
- District youth had a higher estimated prevalence of lifetime use of heroin, nonprescription steroids, and any injectable illegal drug but have similar or lower levels of crack, marijuana, methamphetamine, and ecstasy use compared to their peers nationally.
- Among District youth, prevalence of marijuana use has decreased, but the use of illegal injectable drugs and steroids has increased since the late 1990s.
- Substance use disorders among the District's incarcerated population appear to be similar to the national average. The prevalence of severe mental illness in this population is unknown.

- The District's homeless population appears to have comparable levels of severe mental illness, substance abuse, and co-occurring disorders.

Potential Unmet Need for Behavioral Health Care Services

- Our analyses suggest that potentially several thousand District residents have unmet needs for mental health care services for severe mental illness, and potentially 60 percent of adults and 72 percent of adolescents enrolled in Medicaid managed care who have depression have unmet need for depression services.
- Gaps in surveillance surveys made it impossible to estimate levels of potential unmet need among children with severe mental health conditions.
- Alliance enrollees and uninsured residents have significant mental health needs, with at least 12,000 adults and adolescents potentially having depression alone. Utilization among these individuals is not captured systematically, and the level of unmet need cannot be readily estimated.

4. Use of Public Behavioral Health Care Services Among District Residents

In this chapter, we describe, as available data permit, the levels and types of service use among District residents served by the public behavioral health care system. As described in Chapter 2, the system includes multiple agencies (primarily DMH, APRA, and DHCF) serving overlapping populations with varying levels of behavioral health need and different levels and types of insurance coverage for behavioral health treatment services.

Ideally, the multiple data systems kept by each of the agencies to track the population(s) for which it is responsible would contain a common identifier so that data could be linked and individuals tracked across the multiple ways in which they may interact with the public behavioral health system. In some cases, databases lack interoperability and do not permit within-agency or cross-agency tracking. Where the capacity exists in principle—under certain circumstances, for some populations, and for some specific databases—the practical ability to conduct linkages is limited.

As a consequence, the data available for describing individuals' experience in the public behavioral health system are piecemeal and provide a narrow view into the treatment provided by a particular funder for a particular condition, but not an overarching, comprehensive picture of the full set of care or services received. Several key databases provide pieces of the overall puzzle. For example, eCura is a DMH claims database for MHRS enrollees using MHRS services; Avatar is the information system that tracks service use and care provided at St. Elizabeth's hospital; and claims databases track utilization for Medicaid FFS enrollees, HSCSN enrollees, and Medicaid and Alliance enrollees in managed care plans.

Building that comprehensive portrait of care would require linking data from several sources. Most importantly:

- Linking FFS claims data for adult Medicaid enrollees who are SSI beneficiaries to MHRS claims data from DMH would help the District understand (1) how many severely mentally ill SSI beneficiaries receive care outside the MHRS system, (2) the nature and adequacy of care received by those individuals who only use the FFS system, and (3) overlap or duplication of services received by individuals who obtain mental health care through both the FFS systems and MHRS.¹⁵
- Linking data across eCura and Avatar would allow the District to understand the trajectory of inpatient and outpatient care for its MHRS enrollees.
- Linking APRA and Medicaid/Alliance claims data would allow the District to better understand the burden of substance abuse problems among Medicaid and Alliance enrollees as well as the comorbid physical and mental health needs of enrollees receiving substance abuse treatment.

¹⁵ Linking MHRS claims data and Medicaid managed care claims data would accomplish the same objective, but the number of individuals who are enrolled in managed care and MHRS is much smaller than the corresponding number of FFS enrollees.

- Linking APRA and MHRS claims data from DMH would help the District identify the especially vulnerable population with both severe mental illness and substance abuse disorders and lay the foundation for better coordination of care for these individuals.

Without these linkages, the ability to describe access to and quality of care in the District's behavioral health care system is limited. Moreover, the individual databases that provide information about their specific piece of the system in some cases lack data sufficient for evaluative purposes. Data to evaluate APRA's treatment services are wholly lacking, given the deficiency of the prior tracking system. Virtually no historic data are available to track the volume of services provided, typical patterns of use of services across individuals, the type of care provided and quality of care, or patient outcomes. APRA has migrated to a new infrastructure that holds the promise of better data. Realizing that promise is essential to the District's ongoing ability to monitor and evaluate the state of behavioral health care.

The DMH data infrastructure has evolved to support reporting required by the court-ordered final plan. The individual databases that DMH maintains go far beyond the data that exist at APRA, but these databases remain insufficient and/or have not been rigorously analyzed to understand the trajectory of care that patients experience or to systematically track health outcomes. ECura, for example, has, at least, the potential to provide a richer understanding of patients' use of MHRS outpatient services over time. DMH surveys health, academic, and social outcomes for a small sample of patients each year through its Consumer Service Reviews (CSRs), but the sample is small and does not track outcomes systematically for any patients over time. Going forward, the DMH data infrastructure must evolve to support tracking of individuals across systems and provide a better basis for assessing quality of care.

In what follows, we contribute to understanding access to and quality of care in the District's behavioral health system in several inherently limited but nonetheless important ways. First, we use claims data from the MHRS program to describe MHRS enrollees and their use of care over a one-year period. Second, we analyze claims data for Medicaid managed care enrollees to identify those with diagnosed mental health disorders and provide a snapshot of their use of mental health care services. Third, we analyze claims data for youth suffering from a disabling mental health condition who are enrolled in HSCSN. Finally, we analyze hospital discharge data to identify patterns over time and by location in use of the emergency department for behavioral health issues. Additional details on our methods can be found in Appendix D.

4.1. Mental Health Care Utilization Among the MHRS Population

Our primary data source for assessing utilization patterns of MHRS enrollees is eCura—DMH's patient management and billing system. We used a data extract from FY 2008 and FY 2009 to create a profile of outpatient care received by MHRS enrollees. Because we were unable to gain access to either claims data from the Medicaid FFS program or encounter data from St. Elizabeth's hospital, we have no information on emergency department utilization or inpatient care provided to MHRS enrollees.

We present descriptive statistics for the population of MHRS enrollees who used services during FY 2008 and FY 2009 in Table 4.1. During these two years, a total of 17,494 individuals received one or more services through the MHRS program.¹⁶ Twenty-five percent of enrollees were under the age of 18. The data suggest that approximately 40 percent of children in MHRS who received services are under the care of CFSA (children in foster care); the remainder are ostensibly children with severe mental illness who may or may not also be served by HSCSN. Among all children in MHRS who received services, 18 percent had treatment authorization plans indicating that they were being actively treated for severe mental illness, with the rate among CFSA children at 21 percent and the rate at 17 percent among non-CFSA children. The remainder of children in MHRS who received services appear to receive treatment primarily for nonsevere mental illness, including depressive disorders (34 percent) and attention deficit disorders (26 percent).

Among adult enrollees receiving services in 2008–2009, roughly 40 percent were being treated for schizophrenia or other psychotic disorders, and nearly 27 percent had active diagnoses of bipolar disorder. The remaining one-third of adult MHRS enrollees served had treatment authorization plans during our time period for conditions other than severe mental illness. Among these enrollees, depressive disorders (28 percent) were the most prevalent condition for which enrollees sought treatment.

MHRS enrollees who received services were most likely to reside in Public Use Microdata Area (PUMA) 4 (38 percent), representing Wards 7 and 8, which have disproportionately low-income and minority populations, and were least likely to live in PUMA 1 (1 percent) which comprises mainly affluent sections of the District. See Appendix C for a map of the District's wards and PUMAs. Race and ethnicity information available in eCura indicate that 90 percent of enrollees were non-Hispanic black.

¹⁶ A large number of individuals had treatment authorization plans in eCura but had no claims. Because we could not determine whether these individuals were truly enrolled, we excluded them from the analysis.

Table 4.1: Characteristics of MHRS Enrollees Who Received Services, 2008–2009

	N (%) [*]
Age	
0–5	366 (2.1)
6–11	1,645 (9.4)
12–17	2,354 (13.5)
18–29	2,460 (14.1)
30–49	6,698 (38.3)
50–64	3,971 (22.7)
Gender	
Male	8,774 (50.4)
Female	8,650 (49.6)
Race/ethnicity	
Hispanic	738 (4.4)
Non-Hispanic white	725 (4.3)
Non-Hispanic black	15,082 (90.4)
Other/missing	133 (0.8)
Residential area	
PUMA 1	196 (1.1)
PUMA 2	2,372 (13.6)
PUMA 3	4,269 (24.4)
PUMA 4	6,574 (37.6)
PUMA 5	3,950 (22.6)
Outside D.C.	133 (0.8)
Active diagnoses	
Children	
Psychotic disorders	175 (4.0)
Bipolar disorder	597 (13.7)
ADD/ADHD	1,113 (25.5)
Depressive disorder	1,492 (34.2)
Adjustment disorder/anxiety disorder	809 (18.5)
Other	179 (4.1)
Adults	
Psychotic disorders	5,200 (39.6)
Bipolar disorder	3,521 (26.8)
Depressive disorder	3,618 (27.6)
Adjustment disorder/anxiety disorder	450 (3.4)
Other	340 (2.6)
CFSA involvement ^{**}	
Yes	1,664 (38.1)
No	2,701 (61.9)

* Sample sizes may not sum to 17,494 due to missing data.

**Based on information provided to Access HelpLine or from CSAs; data unlikely to reflect current CFSA status for youth MHRS enrollees.

In Table 4.2 we summarize the intensity of outpatient services provided to MHRS enrollees, measured as the number of visits made by each enrollee to CSAs during a fiscal year.¹⁷ Nearly 60 percent of children have more than ten visits per year, and 41 percent have over 20 visits. Children who are covered through CFSA tend to have higher levels of utilization than other children. Over half of CFSA children have more than 20 outpatient visits per year, compared to

¹⁷ While these results do not account for entry and exit of enrollees from MHRS, our qualitative data suggest that the number of individuals that enroll or disenroll during each fiscal year is not large enough to significantly bias our results.

36 percent for other children. Among adults, only those being actively treated for severe mental illness have comparable levels of utilization. Adults with depressive disorder and adjustment or anxiety disorders tend to have five or fewer visits to CSAs each year, and only 17 percent and 26 percent, respectively, have more than 20 visits per year. Because intensity of treatment depends on each individual’s severity of illness, and because such data are lacking in eCura, we cannot determine whether enrollees are receiving optimal or suboptimal levels of care. Some patients might be receiving care in ED or inpatient settings, but we did not have data to identify utilization outside of care provide by CSAs.

Table 4.2: Intensity of Outpatient Treatment by MHRS Enrollees Using Services, 2008–2009

	% of Enrollees				
	1–2 Visits	3–5 Visits	6–10 Visits	11–20 Visits	>20 Visits
Children (age <18)					
CFSA	10	10	12	16	52
Non-CFSA	19	13	13	19	36
All children	16	12	13	18	42
Adults (age ≥18)					
Psychotic disorders	10	12	16	19	43
Bipolar disorder	15	13	18	20	34
Depressive disorders	22	17	18	18	26
Adjustment/anxiety disorders	26	22	19	17	17
All adults	15	14	17	19	35

CSAs provide an array of services to MHRS enrollees, ranging from diagnostic evaluations to assertive community treatment in enrollees’ homes, depending on an individual’s needs. In Table 4.3 we present information on the spectrum of services provided to MHRS enrollees.

Approximately 91 percent of children and adults received community psychiatric supportive treatment, which includes education and counseling to help enrollees develop coping skills, learn prevention strategies to avoid relapse, and build stronger support systems. A minority of adults received day rehabilitation services, which typically involve group therapy to help enrollees remain integrated in community settings. Approximately 10 percent of children received community-based intervention (CBI), and CFSA children were more likely to receive CBI than non-CFSA children. Only 4.5 percent of enrollees received assertive community treatment (ACT), and this service was almost exclusively provided to adults undergoing treatment for psychotic disorders (8 percent) or bipolar disorders (3 percent). Although we do not know the optimal delivery rates of CBI and ACT—two highly effective, intensive treatment options—we might have expected a higher level of these services, especially for enrollees who are being treated mainly for severe mental health disorders.

Table 4.3: Types of Services Received by MHRS Enrollees Who Used Services, 2008–2009

	% of Enrollees							
	Medication/ Somatic Treatment	Counseling/ Psychotherapy	Community Psychiatric Supportive Treatment	Diagnosis/ Assessment	Day Rehabilitative Services	Community- Based Intervention	Assertive Community Treatment	Other
Children (age <18)								
CFSA	40	60	88	29	–	14	–	9
Non-CFSA	25	29	94	14	–	8	–	6
All children	30	40	91	20	–	10	–	7
Adults (age ≥18)								
Psychotic disorders	72	14	91	5	3	<1	8	11
Bipolar disorder	72	18	92	7	3	<1	3	9
Depressive disorders	60	19	92	8	2	<1	<1	6
Adjustment/anxiety disorders	49	35	86	15	<1	<1	<1	4
All adults	68	17	91	7	2	<1	5	8

NOTE: We excluded intensive day treatment and crisis/emergency services from this table due to a low number of claims (1 and 130, respectively).

Because consistent interaction with CSAs is likely to be critical to the successful management of severe mental illness, we assessed the maximum time between visits for MHRS-covered services for each enrollee during a 12-month period. While large gaps between visits may reflect adequate self-management, they might also reflect poor access or inadequate case management by CSAs. Nearly 45 percent of children and 40 percent of adults have gaps in care exceeding six months during a 12-month period, and nearly 19 percent of children and 18 percent of adults have gaps in service of at least ten months (Table 4.4). Children enrolled in MHRS who are under the care of CFSA had shorter gaps in service, as did adult enrollees who were being treated for severe mental illness. Because treatment episodes for severe mental illness are commonly defined in 90-day increments, gaps in service exceeding 90 days could potentially indicate a quality problem. As part of routine surveillance, we recommend investigating the reasons behind long gaps in care, particularly among the more severely ill.

Table 4.4: Maximum Time Between MHRS-Covered Visits for MHRS Enrollees Who Used Services

	% of Enrollees				
	≤1 Month	2–3 Months	4–6 Months	7–9 Months	10–12 Months
Children (age <18)					
CFSA	13	25	25	22	15
Non-CFSA	6	20	25	28	21
All children	9	22	25	26	19
Adults (age ≥18)					
Psychotic disorders	15	30	23	19	13
Bipolar disorder	9	25	25	23	17
Depressive disorders	6	20	25	27	23
Adjustment/anxiety disorders	4	18	23	26	30
All adults	11	25	24	23	18

4.2. Mental Health Care Utilization Among the Medicaid MCO Populations

Our next set of analyses focused on enrollees of the three Medicaid MCOs operating in the District during FY 2007 through FY 2009. Our analysis is based on the subset of enrollees who have a mental health diagnosis associated with at least one claim in one or more years.¹⁸ Thus, we have no information on those enrollees with mental health disorders who did not seek or obtain care in each year. We present utilization profiles for the Medicaid managed care population only because we have no outpatient utilization data for Alliance enrollees. Notably, many local stakeholders have cited the absence or limited coverage of behavioral health services for District residents enrolled in the Alliance who have nonsevere mental illness to be a significant shortcoming of the public system (DCPCA, 2007).

In the tables that follow, we present data on mental health–related utilization, defined as utilization in which a mental health diagnosis was recorded on the claim. Unlike for the previous set of analyses, for Medicaid MCO enrollees we have data on care received in outpatient, inpatient, and emergency care settings. While our data on outpatient utilization include mental health services provided by primary care physicians and specialists, primary care physicians are

¹⁸ Our unit of analysis is the patient year. Thus, individuals who have claims with mental health–related diagnoses in multiple years may contribute up to three sets of observations, one for each FY.

less likely to report diagnosis codes for mental health conditions when patients report with multiple complaints. Thus, these analyses might underestimate the total level of utilization for enrollees with mental health conditions, though they are likely to include most care provided by specialists. In Tables D.7 and D.8 we report results for each enrollee's total utilization, whether or not each visit was associated with a mental health diagnosis. However, our data file may not include 100 percent of claims for these individuals.

In Table 4.5 we present a snapshot of utilization among Medicaid managed care enrollees who had mental health care utilization across a range of settings. High levels of inpatient and ED use could imply limited access to primary care or suboptimal management of mental health conditions. Thus, this type of analysis can identify areas in which increased use of outpatient care might reduce utilization in other, more costly settings.

Among children who obtained some kind of mental health–related service during 2007–2009, nearly 11 percent received their mental health care in either inpatient settings or through the ED but had no office visits over a 12-month period. For adults, that rate was 17 percent. Approximately 4 percent of children and 6 percent of adults who received mental health services did so exclusively through EDs. Approximately 20 percent of adults and 25 percent of children with either psychotic disorders or bipolar disorders who accessed mental health care had at least one inpatient admission, compared to rates of 8 percent and 3 percent for the overall population of adults and children, respectively, who had some mental health–related utilization. Rates of ED use were also high among children and adults with more-severe mental health conditions who used at least some services (29 percent and 18 percent, respectively).

Table 4.5: Type of Mental Health–Related Service Use Among Medicaid MCO Enrollees with at Least Some Mental Health–Related Utilization, 2007–2009

	N*	% of Individuals Having the Following Types of Care:							Any Inpatient Use	Any ED Use
		Office Visit Only	ED Only	Office Visit and ED	Inpatient Only	Inpatient and Office Visit	Inpatient and ED	Inpatient, ED, and Office Visit		
Children (age <18)										
Psychotic/bipolar disorders	407	60	6	9	3	9	3	11	25	29
Depression	1,334	88	5	3	1	1	1	<1	4	10
Adjustment/anxiety	1,590	91	5	3	<1	<1	<1	<1	2	8
ADD/ADHD	2,858	94	3	2	<1	<1	<1	<1	1	5
All MH conditions	6,577	89	4	3	<1	1	<1	1	3	9
Adults (age ≥18)										
Psychotic/bipolar disorders	1,034	71	5	4	5	6	3	6	20	18
Depression	2,491	89	4	2	3	2	<1	<1	6	7
Adjustment/anxiety	1,218	85	9	3	3	<1	<1	<1	3	12
All MH conditions	5,086	83	6	2	3	2	1	2	8	12

NOTE: MH = mental health.

*The unit of analysis is the patient year. If an enrollee had mental health utilization during all three fiscal years, the enrollee contributed three observations to the analysis.

A major concern among local providers is poor continuity of care for individuals with mental health disorders. Improving the quality of care during transitions between acute care settings and outpatient settings may be one of the most promising opportunities to improve the performance of the public system. In Table 4.6 we present three quality indicators representing key intervention points in the management of patients with mental health disorders. Thirty-day readmission rates are a standard metric for summarizing the quality of inpatient care and discharge planning. By assessing the receipt of outpatient care in the 30 days following an inpatient admission or discharge from the ED, we can understand the extent to which enrollees are receiving adequate follow-up care.

Thirty-day readmission rates were quite high among Medicaid managed care enrollees who had mental health–related utilization, ranging from 16 percent among adults to 20 percent among children. Readmission rates were similar between enrollees with psychotic or bipolar disorders and those with less severe disorders. Enrollees with mental health disorders who were discharged from inpatient care settings had extremely low rates of follow-up care within 30 days. Only 30 percent of children and 18 percent of adults received follow-up care shortly after hospitalizations. Follow-up after ED visits was only 18 percent for adults and 20 percent for children. Enrollees with psychotic and bipolar disorders had higher rates of post-discharge care, yet 61 percent of children and 74 percent of adults with these disorders received no care in the 30 days following hospital discharge. One explanation for some of these findings may be that these admissions triggered enrollment into the MHSR program, where these individuals could receive more-aggressive outpatient mental health treatment.

Table 4.6: Thirty-Day Readmission and Follow-Up Care Indicators for Medicaid MCO Enrollees with Mental Health Diagnoses, 2007–2009

	N*	30-Day Hospital Readmission Rate (%)	Outpatient Follow-Up Care Received Within 30 days of an Inpatient Admission (%)	N*	Outpatient Follow-Up Care Received Within 30 days of an ED Discharge (%)
Medicaid MCO					
Children (age <18)					
Psychotic/bipolar disorders	167	24	37	154	33
Depression	79	15	27	165	18
Adjustment/anxiety	42	19	2	151	13
ADD/ADHD	33	6	33	166	25
All MH conditions	333	20	30	705	20
Adults (age ≥18)					
Psychotic/bipolar disorders	266	19	24	214	29
Depression	160	11	13	175	19
Adjustment/anxiety	45	20	4	148	9
All MH conditions	481	16	18	603	18

NOTE: MH = mental health.

*Sample sizes refer to the number of events (inpatient admissions or ED visits) across all three fiscal years.

4.3. Behavioral Health Care Utilization Among Children with Special Needs

Previously, we assessed utilization of health care services among children enrolled in a District managed care plan known as HSCSN.¹⁹ In the next five tables we display results from that study for children with qualifying mental health diagnoses. These analyses reflect the use of services for 12-month periods between FY 2007 and FY 2008.

In Table 4.7 we present utilization rates in office, ED, and inpatient settings—whether or not it was for the child’s qualifying diagnosis. The majority of children with mental health conditions had at least one office visit. ED utilization varied considerably across conditions, ranging from 32 percent for children with mental retardation to a high of 77 percent for children with episodic mood disorders. For hyperkinetic disorder—the most common qualifying diagnosis in this population—over half of children had at least one ED visit. Rates of inpatient utilization were especially high among children with episodic mood disorder (34 percent).

Table 4.7: Use of Office Care, ED Care, and Inpatient Hospital Care Among HSCSN Enrollees, by Qualifying Diagnosis, 2007–2008

Qualifying Diagnosis	% of Enrollees		
	Any Office Visit	Any ED Visit	Any Inpatient Stay
Hyperkinetic disorder	82	51	16
Developmental delay	86	42	11
Mental retardation	87	32	16
Pervasive development disorder (including autism and psychosis)	89	42	21
Episodic mood disorders	78	77	34
Emotional disturbance	82	47	20
Mild mental retardation	89	39	10
All diagnoses	87	42	11

SOURCE: Chandra et al., 2009.

NOTE: Utilization is for *any* reason; not simply the child’s qualifying diagnosis.

We also examined the percentage of HSCSN enrollees who received mental health specialty care. Table 4.8 indicates that a substantial fraction of children with mental health diagnoses appeared to have no mental health specialty visits, including nearly three-fourths of children with an emotional disturbance, two-thirds of children with adjustment disorders, more than half of children with depressive disorder, and one-third of children with an episodic mood disorder.

¹⁹ For more detailed analyses, see also Chandra et al., 2009.

Table 4.8: Frequency of Specialty Mental Health Visits Among HSCSN Enrollees, by Qualifying Diagnosis, 2007–2008

Qualifying Diagnosis	% of Enrollees	
	No Mental Health Specialty Visit	Five or More Mental Health Specialty Visits
Hyperkinetic disorder	65	17
Developmental delay	92	3
Mental retardation	87	4
Pervasive development disorder (including autism and psychosis)	64	20
Adjustment disorder	63	18
Episodic mood disorders	33	37
Depressive disorder	56	16
Conduct disorder	46	29
Emotional disturbance	73	11
Mild mental retardation	86	5
Other mental retardation	82	7
All diagnoses	79	10

SOURCE: Chandra et al., 2009.

In Table 4.9, we display information about the mix of health care services provided to children with qualifying mental health diagnoses (for any reason). Roughly 8 percent of children had no claims for any type of visit during the year. Children with episodic mood disorders and emotional disturbances were more likely to receive care exclusively in emergency settings (10 percent and 9 percent, respectively) compared to other HSCSN enrollees.

Table 4.9: Use of Office Care, ED Care, and Inpatient Hospital Care Among HSCSN Enrollees, by Qualifying Diagnosis

Qualifying Diagnosis	Percent of enrollees							
	No Visits	Outpatient Only	Inpatient Only	ED Only	Outpatient and Inpatient	Outpatient and ED	Inpatient and ED	Inpatient, Outpatient, and ED
Hyperkinetic disorder	11	46	<1	6	<1	30	<1	5
Developmental delay	8	55	<1	5	<1	28	<1	3
Mental retardation	11	61	0	3	1	22	0	3
Pervasive development disorder (including autism and psychosis)	7	55	0	3	<1	27	<1	7
Episodic mood disorders	10	26	1	10	3	34	2	15
Emotional disturbance	6	54	0	9	1	23	2	4
Mild mental retardation	7	59	0	4	0	28	<1	3
All diagnoses	8	50	<1	5	1	28	<1	8

NOTE: Utilization is for *any* reason; not simply the child's qualifying diagnosis.

Children with episodic mood disorders were also much more likely compared to children with other disorders to have multiple inpatient stays (see Table 4.10).

Table 4.10: Inpatient Admissions Among Children in HSCSN, by Qualifying Diagnosis, 2007–2008

Qualifying Diagnosis	Number of Inpatient Stays			
	1 or More	1	2	3+
Hyperkinetic disorder	7	4	1	1
Developmental delay	4	3	<1	0
Mental retardation	5	3	<1	<1
Pervasive development disorder (including autism and psychosis)	8	5	1	2
Episodic mood disorders	21	14	2	5
Emotional disturbance	8	4	2	2
Mild mental retardation	4	2	2	<1
All diagnoses	11	7	2	3

NOTE: Utilization is for *any* reason; not simply the child’s qualifying diagnosis.

In Table 4.11 we present 30-day readmission rates for HSCSN enrollees with mental health disorders. Readmission rates ranged from approximately 25 percent for children with hyperkinetic disorder up to 60 percent for children hospitalized for emotional disturbance.

Table 4.11: Readmission Rates Among Children in HSCSN with at Least One Inpatient Admission, by Qualifying Diagnosis, 2007–2008

Qualifying Diagnosis	Percentage of Children Readmitted Within One Month
Emotional disturbance	60
Other mental retardation	56
Conduct disorder	47
Episodic mood disorders	45
Pervasive development disorder (including autism and psychosis)	42
Hyperkinetic disorder	25

NOTE: Utilization is for *any* reason; not simply the child’s qualifying diagnosis.

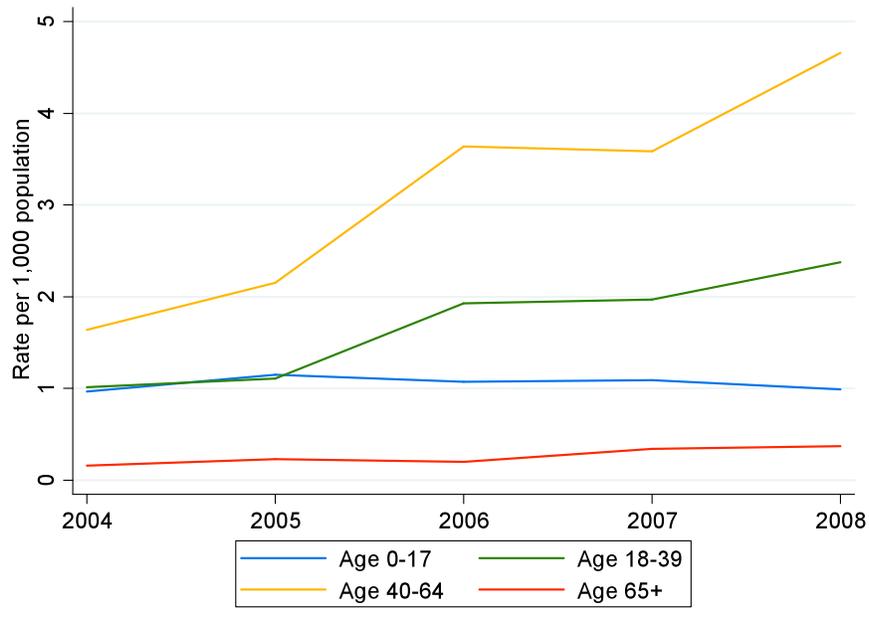
4.4. Trends in ED Use for Behavioral Health Conditions Among District Residents

The previous three sections provided a snapshot of health care utilization for populations in specific health plans or programs. Few data sources exist that allow an assessment of the care received by the entire District population, including those residents who do not have health insurance—many of whom may have significant mental health care needs. The DC Hospital Association compiles two all-payer databases that provide District-wide utilization information: one that contains all discharges from acute care hospitals and another that includes discharges from all EDs in the District. Because the inpatient database excludes psychiatric hospitals, such as St. Elizabeth’s and the Psychiatric Institute of Washington, and because these hospitals are two of the most commonly used for persons with mental illness, we only assessed patterns in ED discharges. We report only selected results; for many behavioral health conditions, ED utilization rates were too low to support meaningful trend analyses, or no noteworthy trends were observed.

Using five years of data on ED use specifically for mental health and substance abuse disorders, we identified several potentially concerning trends that are worthy of closer surveillance. First, between 2004 and 2008, discharge rates for bipolar disorder more than doubled for residents age 18–39 and increased by approximately threefold for residents age 40–64 (Figure 4.1). Studies

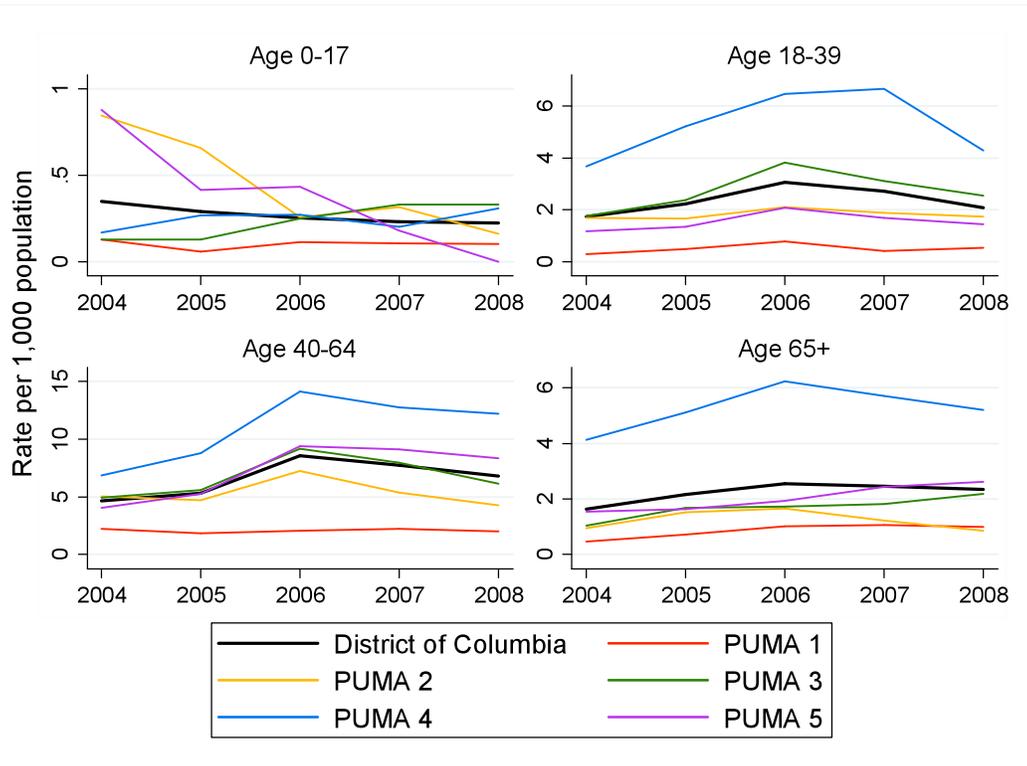
that have documented similar trends in bipolar disorder point to the historic underdiagnosis of the condition to explain these trends, particularly among children (Moreno et al., 2007). Thus, these trends might simply reflect better diagnosis of bipolar disorder among previously underdiagnosed or underserved populations.

Figure 4.1: Rates of ED Discharges for Bipolar Disorders, by Age Group



Among individuals with schizophrenia, we observed potentially significant geographic disparities in ED use. ED use was considerably higher in PUMA 4 (Wards 7 and 8) across all age categories (except among children). These trends may be attributable to low access levels to specialty behavioral health services for residents of Ward 7 and 8 or possibly to other factors. We recommend further investigation of the determinants of these trends. Among 18–39 year olds and among the elderly, ED discharges among persons with schizophrenia occurred at nearly twice the rate of the general population (Figure 4.2).

Figure 4.2: Rates of ED Discharges for Schizophrenia, by PUMA and Age Group



When looking at all mental health diagnoses collectively, PUMA 4 (Wards 7 and 8) residents had unusually high ED utilization rates compared to all other areas, although the disparities were greatest among individuals age 18–39 and the elderly (Figure 4.3).

Discharge rates for substance abuse disorders increased substantially between 2004 and 2008 for nearly all age groups (Figure 4.4). Among 40–64 year olds, utilization rates increased by 50 percent, and rates among 18–39 year olds doubled over the five-year period. Trends among the 18–39 year olds were driven largely by residents of PUMAs 2–4 (mostly Wards 4–8), while among 40–64 year olds, ED use for substance abuse increased in nearly all parts of the District except PUMA 1.

Figure 4.3: Rates of ED Discharges for All Mental Health Disorders, by PUMA and Age Group

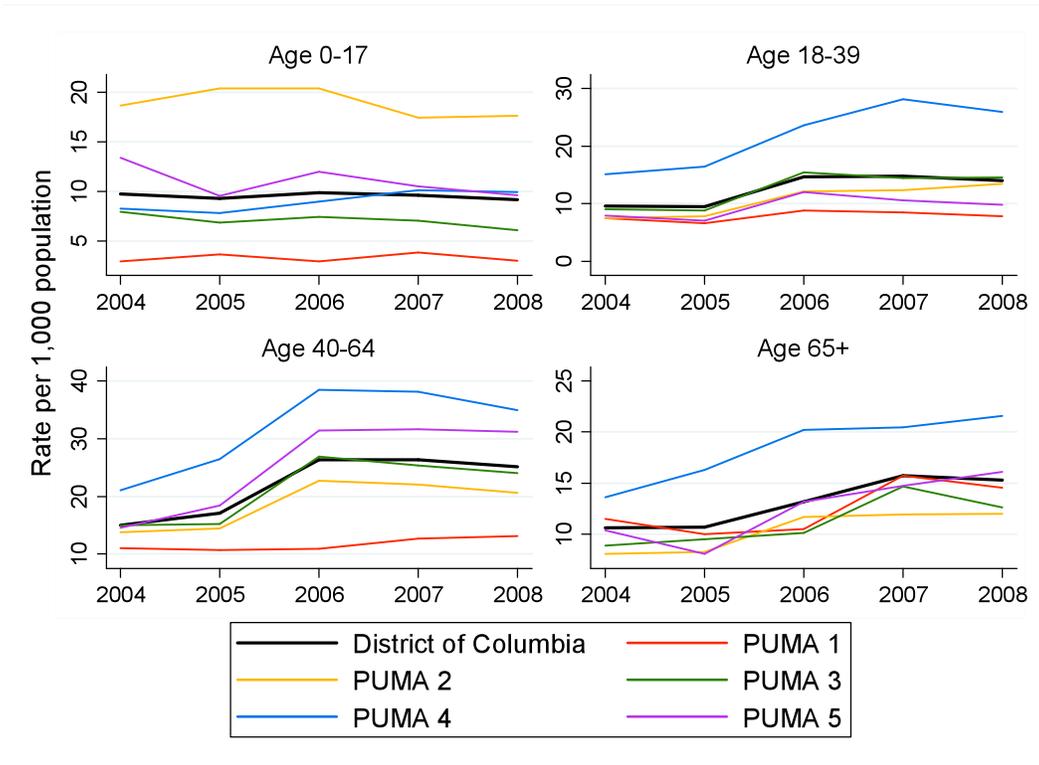
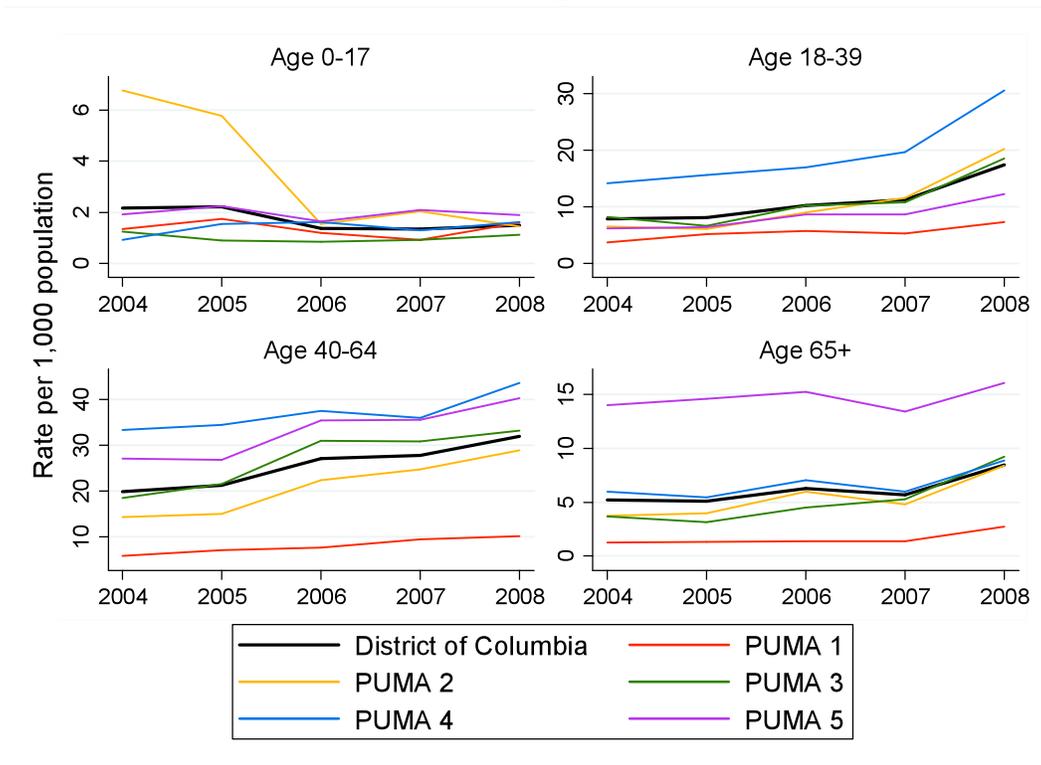


Figure 4.4: Rates of ED Discharges for Substance Abuse Disorders, by PUMA and Age Group



While all-payer ED utilization rates can help DMH understand gaps in primary care for District residents with behavioral health conditions, these data have a number of important limitations. Mental health diagnoses are often significantly underreported in administrative data sources, including ED discharge abstracts, because these patients often present to the emergency department with other complaints that are not mental health–related, so we might be underestimating these rates—though they would not affect the trend analysis (Blanchard et al., 2010). Moreover, the absence of a unique patient identifier prevents us from assessing repeated ED use at the individual level. Thus, these data are most useful for analyzing aggregate trends in utilization for specific conditions.

4.5. Summary

Outpatient Utilization by MHRS Enrollees

- 60 percent of children and 54 percent of adults enrolled in MHRS have over ten visits per year to CSAs, and a large percentage have more than 20 visits per year.
- Approximately 16 percent of children and 15 percent of adults enrolled in MHRS have contact with the MHRS system only one or two times per year. For individuals undergoing active treatment for severe mental illness, such utilization rates are likely to be inadequate.

- Only 10 percent of children and 5 percent of adults enrolled in MHRS receive intensive treatment in the forms of CBI and ACT, respectively.
- 45 percent of children and 41 percent of adults who are MHRS enrollees have gaps in care that exceed six months during a 12-month period, and 19 percent of children and 18 percent of adults have gaps of ten months or longer.

Utilization by Adults and Children Enrolled in Medicaid Managed Care

- 11 percent of children and 17 percent of adult enrollees with mental health disorders who had at least some mental health services use had no outpatient visits per year but had one or more inpatient admissions or visits to the ED.
- Among children with psychotic or bipolar disorders who used some mental health services, 25 percent had at least one inpatient admission over a 12-month period and 29 percent had one or more ED visits. Among adult enrollees with these same disorders who used some mental health services, 20 percent had inpatient stays and 18 percent had ED visits.
- 4 percent of children and 6 percent of adult MCO enrollees who received some mental health services during the course of a year received them exclusively through EDs.
- Thirty-day readmission rates after a mental health hospitalization were 20 percent for children and 16 percent for adults.
- A minority of adult Medicaid MCOs enrollees had office visits in the 30 days following a mental health–related inpatient stay (18 percent) or following discharge from the ED (18 percent).

Utilization by Children Enrolled in HSCSN

- A substantial fraction of children with disabling mental health conditions appeared to have no mental health specialty visits, including nearly three-fourths of children with an emotional disturbance, two-thirds of children with adjustment disorders, more than half of children with depressive disorder, and one-third of children with an episodic mood disorder.
- Approximately 10 percent of children with episodic mood disorders and 9 percent of children with an emotional disturbance receive care exclusively through the ED. Children with episodic mood disorders are far more likely to have multiple inpatient stays and repeated ED use compared to other HSCSN enrollees.

District-Wide ED Utilization Trends

- Between 2004 and 2008, ED utilization for bipolar disorder more than doubled for residents age 18–39 and increased fourfold for residents age 40–64.
- The rate of ED use associated with schizophrenia is considerably higher in Wards 7 and 8 compared to all other parts of the District; rates are as much as twice the District-wide rate for most age groups.
- The rates of ED use by residents of Wards 7 and 8 are much higher than the District average when looking at all mental health conditions collectively.
- The rate of ED utilization for substance abuse disorder increased by 50 percent among 40–64 year olds, and doubled among 18–39 year olds over the last several years, fueled by increases in Wards 4–8.

5. Local Perspectives on the Behavioral Health System

This section describes the perspectives of local stakeholders on the provision of behavioral health services in the District of Columbia. First, we outline the approach we used to conduct the interviews and focus groups. Then we discuss key themes arising from the discussions, including concerns with gaps in services and care coordination. Incorporating the perspectives of a diverse group of stakeholders is critical to understand what aspects of the current system work well, identify areas in need of assistance, and assess strategies to ameliorate deficiencies.

5.1. Methods

We conducted interviews with a wide range of individuals and organizations to provide insight into the behavioral health safety net system in the District of Columbia. Interviewees included government employees from DMH, APRA, and DHCF; providers of mental health and substance abuse services; primary care providers; insurance company executives; representatives of hospitals; local nonprofit organizations; and researchers and experts on the delivery of behavioral health care. In total, 54 interviews with 81 people were conducted between August 2009 and May 2010.

Participation in the interviews was voluntary, and no financial incentive was offered. Interviews were conducted by RAND staff and were semistructured. Interviews were tailored to the particular individual and agency in order to understand their roles in the behavioral health system in the District of Columbia, challenges they faced, and potential opportunities to improve services. Notes were taken during the interviews, and the notes were coded by two researchers to identify key themes across interviews.

Two focus groups (involving 22 participants) were conducted with District mental health and substance abuse providers. The first was conducted at DMH on February 25, 2010 (12 participants), and the second at APRA on March 10, 2010 (ten participants). The focus groups occurred following monthly meetings at the respective agencies. These meetings are opportunities for the agencies and the providers—who are typically private, nongovernmental organizations that contract with the agencies—to exchange information and updates. The attendees represented a wide range of service delivery organizations in the District, and their roles in the organizations typically included clinical management and oversight. DMH and APRA staff were not present during the focus group sessions.

Like the individual and small group interviews, participation in the focus groups was voluntary, and providers were not paid. Focus groups were conducted by two RAND researchers and a research assistant. Notes were taken during the session, and the groups were tape-recorded, allowing for the use of quotations to illustrate the themes. We used an open-ended protocol to understand key challenges to providing behavioral health services and identify strategies to improve these services.

In addition to the focus groups conducted specifically for the current report, we highlight key findings from focus groups previously conducted by RAND researchers for reports on health

care in the District that are pertinent to behavioral health (Lurie et al., 2008b, and Chandra et al., 2009). These focus groups included

- five focus groups (57 participants) on primary care, specialty services, pharmaceuticals, hospitals, and ED visits (March and April 2008)
- eight parent groups (70 participants) on children’s health and health care (March–May 2009)
- two teen groups (17 participants) on youth health issues (March–May 2009)
- seven provider groups and interviews (43 providers) on children’s health (March–May 2009)
- thirteen provider groups and individual interviews (95 providers) (March and April 2008).

5.2. Key Themes from Interviews and Focus Groups

Participants highlighted several major challenges to the optimal provision of behavioral health services. Two recurring themes were gaps in care and difficulties in coordination of care for particular populations and particular services. Other themes revolved around challenges related to housing, financing, information technology, and quality measurement.

Theme 1: Gaps in the Provision of Behavioral Health Services

Stakeholders expressed concern over gaps in the availability, provision, and quality of behavioral health services, which stakeholders felt prevented their clients from receiving optimal care. In terms of public mental health services, stakeholders asserted that many consumers enrolled in MHRS may not be getting services appropriate to the level of care they need, that many others with mental disorders in need of treatment are ineligible for MHRS, and that there is a lack of tailored services for particular populations. With substance abuse, challenges were noted with respect to intake, vouchers, detoxification, and obtaining specific services.

Gaps in mental health services: A number of stakeholders expressed the perception that MHRS fails to adequately serve some District residents with mental health disorders. For example, some people enrolled in MHRS for a severe mental illness may require a lower level of care than others because their symptoms and impairment may be less severe. These patients frequently want only counseling and medication, not community support, but providers find it difficult to accommodate them. Though the patients require a lower level of care, the care still requires a high level of administrative work.

“We get a lot [of consumers] that don’t really need . . . a lot of community support. They want counseling and medication, but the way it’s set up, it’s hard to do that because of the paperwork requirements.”

Providers said that the lack of less-intensive care created additional burden on the agencies that provide MHRS services (CSAs) and additional cost for the overall system. One interviewee

believed that these clients may be better served at an FSMHC or other sites of care at which community support is not required.

Others voiced concern that individuals who do not qualify for MHRS may have difficulty accessing mental health services. They asserted that patients covered under the Alliance and those without insurance are particularly vulnerable due to the lack of coverage for mental health service. CSA providers described reluctance to treat patients not enrolled in MHRS, and medical clinics frequently provided uncompensated mental health care (DC Primary Care Association, 2007).

Further, the restricted formulary for Alliance patients not enrolled in MHRS created barriers to care. Along with the limited number of psychiatric medicines on the formulary, patients need to travel to an Alliance pharmacy for these medicines, which may create logistical challenges for patients and increase medication nonadherence. This concern over lack of access to medicines was echoed in the previous report's community stakeholder focus group (Lurie et al., 2008b).

Individuals enrolled in Medicaid managed care plans who do not qualify for MHRS are eligible to receive mental health services. However, some interviewees noted that it can be difficult for enrollees to obtain services. Community service agencies we interviewed were reluctant to contract with MCOs due to fears about low reimbursement rates and high administrative burdens. However, for these organizations, it was felt that MCO patients represented a relatively small proportion of their clients.

Interviewees expressed concerns over a lack of targeted services for specific populations with mental disorders, including geriatric consumers; transitional-age youth (under 21 years old); children who are not part of CFSA; foreign-language speakers in the SMHP; and gay, lesbian, bisexual, and transgender clients.

Gaps in substance abuse treatment services: Interviewees described gaps in care for those with substance abuse disorders. Providers described patients frequently arriving in a state of crisis, requiring immediate services that are not currently being provided by the substance abuse treatment system. The voucher system was cited as a major cause of this gap. In order to receive a voucher, clients typically go through APRA's central intake. Participants in the focus groups worried that many patients in need of treatment would not present to APRA to obtain a voucher. A hospital-based provider noted that some clients, even after being treated for life-threatening withdrawal at a local hospital, were required to travel to APRA in order to receive a voucher. Another provider described the way in which their organization had dealt with this issue: They had staff members escort their clients to APRA, even though this service is not billable.

Another barrier cited was the need to prove District residency to obtain a voucher. This typically requires a D.C. driver's license, which may be difficult for some consumers (especially homeless ones) to obtain. Other difficulties described with the voucher system included problems with postdated vouchers (meaning that treatment offered before the start date was not reimbursed), potential delays in obtaining vouchers from APRA after a client has gone through intake, and delays in receiving approval for reauthorization of services when treatment needed to be

extended. Providers also suggested that greater effort be directed toward linking clients with supportive services when they are interviewed for vouchers.

With regard to treatment, interviewees described gaps in the provision of certain services. In particular, there are few options for buprenorphine treatment (a medicine used to treat opioid addiction), a lack of residential programs, and a shortage of qualified substance abuse providers. In terms of drug detoxification, stakeholders believed that the time allotted by APRA was insufficient. Further, clients with mental health disorders were not automatically linked to a CSA from inpatient detoxification, and clients were not given their medications on completing detoxification. Stakeholders in the focus group noted that APRA had reduced the number of allowable days in residential treatment, which the stakeholders worried could impede care.

“[The] decreased length of time for detox and the decreased length of time for residential . . . treatment are serious gaps.”

Theme 2: Coordination of Care

People with mental health and substance abuse disorders interact with a host of different agencies and programs. A major challenge facing these individuals is a lack of coordination of care among the organizations that provide mental health and substance abuse services. This concern over poor care coordination was expressed in both focus groups and by many of the interviewees, including government employees.

Co-occurring mental health and substance abuse: In both of the behavioral health focus groups and across the interviews, providers noted difficulty coordinating care for patients dually diagnosed with mental health and substance abuse issues. These difficulties included problems accessing services, logistical challenges of working with separate DMH and APRA systems, and difficulty billing for case management services. Specific problems were noted with respect to people in the criminal justice system and for children. As described by one provider, the failure to concurrently address co-occurring disorders appropriately may undermine the treatment process:

“[One] of the biggest issues that I see is [that] they fail to address and understand that there’s mental health and . . . substance abuse, [and] without addressing them both at the same time, you’re going to have a problem. And that slows up the process for the people that are giving the treatment.”

For organizations that provide both mental health and substance abuse treatment, providers described the procedural inefficiencies of filling out separate charts and obtaining separate reimbursements from DMH and APRA for the treatment of one client. This decreased providers’ desire and ability to participate simultaneously in both reimbursement systems.

“There’s a huge break between DMH and APRA. . . . [There are] separate charts, separate reimbursements. There is confusion.”

Mental health providers who need to refer patients outside their organization for substance abuse treatment also face barriers. Providers stated that APRA's central intake rules made it challenging to link consumers to APRA and that finding placement was especially difficult for clients who needed residential treatment.

“[With] residential programs, we have a lot of difficulty getting people into programs.”

Because of challenges coordinating with APRA, many of the mental health providers go directly to specific drug treatment programs with which they have formed relationships rather than sending clients to APRA's central intake.

“By the time someone is in dire need of a substance abuse program . . . you need to get them placed ASAP. We don't have the time to wait. . . . We can't wait for APRA.”

Participants also expressed concerns that crisis services for people with co-occurring disorders are not connected to substance abuse services. After individuals with an acute mental health need are discharged from CPEP, they must then go through APRA's intake process after CPEP discharges them. Conversely, there is no easy way for patients in the detoxification center to be easily transferred from APRA to CPEP.

Substance abuse providers felt that coordination of care for individuals with co-occurring disorders functioned best when the client was already linked to a CSA. In these instances, substance abuse providers were able to directly contact the CSA to help ensure that the clients were receiving mental health services. For substance abuse clients with mental health needs who are not already enrolled in a CSA, it can be difficult to connect clients to mental health services. Substance abuse providers report calling DMH's Access Helpline on behalf of their clients, a process that can be time-consuming. To provide better care, substance abuse providers recommended having CSAs that are dedicated to working with clients with co-occurring substance abuse. Substance abuse providers felt that this might not only facilitate enrolling their clients in mental health services but also improve continued communication between the providers.

Interviewees also described a lack of coordination regarding co-occurring mental health and substance abuse disorders for specific populations. In particular, interviewees expressed concern over the lack of care coordination for individuals in the criminal justice system. One noted that there is no treatment in jails for individuals with co-occurring disorders, and another expressed concern that DMH assessments for forensic patients did not adequately evaluate them for substance abuse disorders. One stakeholder highlighted the need for more collaboration for children with co-occurring mental health and substance abuse disorders, in particular for children in foster care.

In addition to problems with coordinating care for dually diagnosed clients, participants cited a need for better assessment of co-occurring disorders in clients. One interviewee stated that the workforce is not adequately trained to identify co-occurring disorders. The COSIG grant was designed to train providers in the assessment of co-occurring disorders. However, interviewees expressed skepticism that the effects of the COSIG grant would reach the direct provision of

services and found that training was not institutionalized in a way that would continue provider education at each agency.

Behavioral health and physical health: Problems with care coordination were seen as extending to patients with behavioral health problems and physical ailments. Interviewees stated that mental health providers and substance abuse agencies frequently do not have strong relationships with patients' primary care providers. One interviewee said that it took significant administrative time to obtain information from primary care providers and that this time was not billable. This agency would send release of information forms to primary care providers, but they frequently did not hear back from them. Conversely, primary care providers described difficulty in obtaining records from mental health providers. Also, some interviewees believed that there were individuals being seen in primary care clinics who were not appropriately screened for behavioral health problems or linked with DMH and APRA services. One interviewee noted that there should be greater coordination with the HIV/AIDS, Hepatitis, STD, and Tuberculosis Administration (HAHSTA) for patients. Some providers are attempting to deliver co-located mental and physical health care as a way to help address this problem.

Coordination for children with behavioral health issues: Providers described specific coordination challenges facing children with mental health or substance abuse issues, in particular for those in foster care and for transitional-age youth (typically young adults under age 21 who are changing from youth-directed services to adult models of care). In focus groups on children's health conducted for an earlier assessment of D.C.'s health care system, providers described the system as fragmented, without adequate communication between primary care providers, school-based mental health providers, and offsite mental health specialists (Chandra et al., 2009). Providers expressed a need for better case management to help patients navigate the mental health system. One interviewee stated that there should be a "superagency" for children and youth in order to help children navigate the system and receive the care they need.

Children in foster care frequently switch foster parents and agencies, creating logistical problems in trying to coordinate care. Without adequate communication with the foster agency, it may be difficult to locate the children. Providers further conveyed the need for better collaboration between CFSA and DYRS.

Coordination of services was also said to be a large problem for transitional-age youth in both the mental health and substance abuse systems. Stakeholders noted that few programs specifically target this population and worried that these youth were more likely to fall through the cracks in the system.

General problems with care coordination: Problems with care coordination generally include the inability to bill for time to support these activities, concerns over privacy, and lack of an information technology infrastructure. Both mental health and substance abuse providers stated that they spent considerable time doing work that amounts to case management, such as making phone calls to help their clients obtain necessary services. Similarly, results of interviews with providers found that physicians performed a significant amount of case management for Medicaid and Alliance enrollees (Lurie et al, 2008b). One focus group provider said:

“[Now] what we have is basically [substance abuse] counselors doing case management. . . . It’s not really about substance abuse, it’s about case management, getting the client connected so that when he leaves us he can further his treatment in a different modality.”

Some interviewees noted that coordination of care through case management was made even more challenging by the fact that phone calls and email exchanges among members of a consumer’s care provision team were not billable. This made “teaming”—the time-consuming but important process of making sure all members of the client’s team are up to date on the status of their clients—more difficult. Also problematic was that subproviders—providers to whom CSAs contract for specific services—sometimes find it difficult to obtain treatment plans from CSAs.

Providers expressed the view that more case managers would help patients navigate the systems more effectively. They also expressed a desire to designate a point person or liaison at the different agencies so that providers would know whom to contact (e.g., a substance abuse or APRA liaison for mental health providers, a jail liaison for related services). However, one stakeholder noted that APRA pays for and requires the use of case managers, but APRA is infrequently billed for these services. This stakeholder was uncertain why APRA was not billed more often for these services.

Stakeholders noted difficulty in trying to coordinate care across substance abuse and mental health providers due to the lack of an informed consent form for information-sharing and confusion over the Health Insurance Portability and Accountability Act (HIPAA) and confidentiality that some providers feared precluded conversations.

Inability to access information electronically from other agencies was also cited as a source of poor care coordination and is discussed in a separate section.

Theme 3: Children and Youth Behavioral Health Services

In addition to the problems with care coordination for children and youth described above, interviewees noted several concerns specific to this population, including a dearth of programs and a need for better assessment tools used for the intake process. With regard to mental health, stakeholders discussed a lack of residential programs for youth, youth-focused community-based services, child psychiatrists, and services for children with mental retardation. While many youths involved in the criminal justice system may have mental disorders, one stakeholder believed that these issues are underrecognized and underreported. This stakeholder described an ongoing collaboration between DMH and CFSA to train providers to work with patients; however, the stakeholder worried that participation has been insufficient to be effective.

In focus groups from one of our prior reports, school-based providers noted the high prevalence of behavioral health issues in schools but difficulties in getting children excused from classes and finding adequate time for counseling (Chandra et al., 2009). When a higher level of service is needed, the onus is on the parents to bring the child to mental health services. This can be difficult, especially when parents may be dealing with their own mental health issues and facing

stigma against mental disorders. For children in MCOs, providers noted that children may be authorized for a limited number of visits, which may not be sufficient for the child's need, and that it could be difficult to find mental health specialty providers.

Similarly, stakeholders described a lack of substance abuse treatment capacity for children and youth in the District. Another particular challenge that was raised by substance abuse providers during the focus group was the use of the Global Assessment of Individual Needs (GAIN), APRA's recently implemented youth assessment tool. Because the GAIN is lengthy, youth may find it difficult to complete the entire questionnaire, impeding their enrollment in needed services. Another interviewee believed that the parent engagement piece of the Adolescent Substance Abuse Treatment Expansion Project (ASTEP) has been less successful than was hoped.

Theme 4: Developmental Disabilities

Stakeholders noted that children and adults with developmental disabilities may face particular challenges. In particular, people felt that not enough attention was paid to diagnosing and treating individuals with developmental disabilities, that the Department of Disability Services (DDS) lacks resources and capacity, and that misperceptions of mental disorders result in individuals with disabilities being referred to CPEP when they may more appropriately be treated by other providers. Providers in the mental health focus group felt that for clients who qualify for both DDS and DMH services, one department needs to take primary responsibility. Also, since individuals may have a hard time finding proof that their developmental disability was diagnosed before age 18, mental health providers in the focus group felt that the age requirement for DDS eligibility should be relaxed.

Theme 5: Housing

Interviewees described a lack of housing for individuals and families in the District with mental health and/or substance abuse problems. Waitlists for people in need of housing through DMH remain long, and interviewees expressed a need for more supported independent living and housing vouchers. Stakeholders noted that this lack of housing created bottlenecks when trying to move people out of the hospital. One interviewee stated that the amount of money to support subsidies for DMH's HomeFirst program is inadequate, leading to poor quality housing. In comparison, another stakeholder pointed out that lack of affordable housing is a problem facing many jurisdictions and that the District has been more proactive than many other places.

As a result of the housing shortages, providers in the focus groups described consumers being placed into treatment categories and settings that they did not need for the sake of obtaining housing. One mental health provider cited an example of a client who no longer met MHRS criteria but remained in MHRS in order to keep his or her housing subsidy. Similarly, providers in the substance abuse group said that there was a lack of residential treatment centers and recovery housing.

“Sometimes people are placed in residential treatment when they really don't need that level of care. It's more of a housing need than anything else.”

For homeless individuals, interviewees described a need to have greater coordination of services with surrounding jurisdictions. Interviewees expressed concern that there were few programs for homeless persons with substance abuse problems and that APRA was not sufficiently involved in the District's homeless services system. Stakeholders voiced concern that there was insufficient capacity for homeless adolescents and that more capacity and coordination were needed for homeless individuals in the criminal justice system with mental health and/or substance abuse problems.

Theme 6: Reimbursement

Providers of mental health services expressed concern over low reimbursement rates that impeded their clinics' ability to offer optimal services. Along with low reimbursement rates for outpatient MHRS services, providers stated that many of the services are not reimbursed at all (e.g., care coordination and telephone calls that are supposed to fall under community support services). Providers noted that the payment system requires a great deal of paperwork and stated that it may be easier to bill Medicaid directly for MHRS patients rather than routing bills through DMH. Other providers described losing money following a visit to a psychiatric clinic and receiving insufficient funds from the MHRS task order to provide the services their clients need. Providers further stated that it is hard to retain qualified staff for financial reasons. Focus groups with primary care providers echoed concerns over low reimbursement for Medicaid patients and difficulty getting authorization and referral requests for Medicaid MCO patients (Lurie et al, 2008b).

Many substance abuse providers contended that more funding was needed to provide services, including case management (as described above). Stakeholders stated that substance abuse benefits are not currently covered under Medicaid or the Alliance. Because the Federal government pays for a portion of Medicaid, the lack of coverage may lead to lost revenue for the District.

Hospital providers also expressed concern over low rates of reimbursement along with difficulties of IMD exclusion for Medicaid. The IMD exclusion prohibits some District hospitals from receiving Medicaid payment for mental health care.

Theme 7: Data Systems

Stakeholders expressed concerns that the proliferation of separate behavioral health data systems prevents coordinating care across providers and across systems. The lack of connection, stakeholders stated, not only impeded direct patient care but also led to a system that was unable to adequately plan for the community's needs.

With regard to mental health, providers noted that EDs, CPEP, and CSAs are unable to access records electronically across different sites of care. For example, CPEP is not currently able to link its system with eCura, DMH's claims processing system that is employed by CSAs. Similarly, another interviewee noted that hospitals do not have access to eCura data, making it

more difficult for providers to obtain prior information on their patients. In APRA, there is little tracking of voucher use.

More generally, stakeholders described a lack of connections between DMH and APRA's data systems. Stakeholders were uncertain whether APRA's new WITS system would be able to interface with DMH systems. Stakeholders also expressed concern that DMH and APRA were unable to connect with the city's Homeless Management Information System (HMIS).

Providers believed that a citywide system would help providers operate more efficiently by allowing access to primary care and specialty records and cutting down on duplicative information transfer between the organizations, DMH, and APRA.

Theme 8: Quality Assessment and Improvement

Though some interviews described efforts to strengthen quality assessment at DMH and at APRA through the use of WITS, many stakeholders felt that there was still a need for improved quality assessment and improved quality of care. However, they noted that difficulty in obtaining accurate data impeded their ability to understand what aspects of the system were working well. At the provider level, stakeholders cited variation regarding organizations' capacity to measure and track quality. At a systems level, many stakeholders listed the need for increased quality monitoring. Overlapping jurisdictions and agencies may complicate the quality assessment process. For example, though many services provided by CSAs are paid for by the DHCF, CSAs are under the supervision of DMH, potentially necessitating greater coordination in quality assessment and improvement programs. Other stakeholders stated that some of the monitoring that is occurring as mandated by the Dixon case and the Department of Justice is time-consuming and expensive. Much of the monitoring focuses on the care provided at St. Elizabeth's Hospital, and the resources spent on monitoring may divert funds from other forms of quality improvement.

6. Challenges and Strategies for the District’s Behavioral Health Care System

In this chapter, we summarize key challenges facing the behavioral health care system in the District, as identified from our data analyses, informational interviews, stakeholder interviews, review of literature, and focus groups. Our assessment suggests several high-level priorities for the District, including:

1. Work to reduce unmet need for public mental health care.
2. Track and coordinate care for individuals in the public system with mental health diagnoses.
3. Improve the availability and accessibility of substance abuse treatment services.
4. Increase the coordination of care for individuals with comorbid mental health and substance abuse conditions.
5. Fundamentally upgrade the data infrastructure of the public behavioral health care system to allow for improved monitoring of service utilization, quality of care, and patient outcomes.

In what follows, we describe the five priorities and strategies for addressing them and then enumerate other important but more-specific challenges facing the public behavioral health care system.

Priority Area 1: Work to reduce unmet need for public mental health care.

With the tilt of DMH funds toward Medicaid covered services and people, the availability of free or low-cost mental health care services for uninsured District residents and those enrolled in the Alliance is limited. Individuals with mild to moderate mental disorders, especially the uninsured and those covered under the Alliance, have limited or no insurance coverage for or access to mental health services. The Alliance does not provide mental health or substance abuse benefits (other than for detoxification in life-threatening circumstances). Many Alliance beneficiaries with mental health disorders are managed in the primary care setting with a limited drug formulary and very few options for referral. Charity care or paying out of pocket for care may be an option for some uninsured and Alliance enrollees with mental health disorders, but these opportunities are haphazard. Yet, Alliance enrollees and uninsured residents have significant mental health needs, with potentially 12,000 adults and adolescents having depression alone. Utilization among these individuals is not captured systematically, and the level of unmet need cannot be readily estimated. A key concern is whether the patchwork system of care is sufficient for meeting the behavioral health needs of these individuals. Closing the gap in care could be achieved through investment in expanded mental health benefits for Alliance enrollees and/or investment in free or discounted mental health treatment capacity, including through local clinics or FSMHCs.

In addition, our analyses suggest the existence of a sizeable pool of individuals (of unknown insurance status) who have severe mental illness but have not connected to MHRS. Outreach is crucial to ensure that individuals with severe mental illness who are eligible for MHRS are enrolled in MHRS. The District could establish formal systems for partnering with local hospital

EDs and other organizations to identify individuals with severe mental illness who are not connected to the system, enabling follow-up by MHRS staff.

Priority Area 2: Track and coordinate care for individuals in the system with mental health diagnoses.

There are significant gaps in care among individuals already receiving public services, such as Medicaid, MHRS, and HSCSN. For example, among Medicaid managed care enrollees, there appears to be unmet need for care for mental health conditions, such as depression. Our rough estimates suggest that as many as two out of three enrollees with depression do not receive services for their condition. In addition, among Medicaid managed care enrollees with mental health conditions who use care, some appear to receive care only in a hospital setting (11 percent of youth enrollees with a mental health condition and 17 percent of adult enrollees with a mental health condition). Our analyses of use of service use also show that very few enrollees receive any follow-up care after discharge from inpatient settings or after ED, visits despite the fact that these are key leverage points in managing patients' mental health disorders. In addition, among those in the MHRS program, few enrollees receive services such as day rehabilitative services, intensive day treatment, CBI, and ACT in practice, although these services are ostensibly available.

In addition, available evidence suggests that many children with disabling mental health disorders have insufficient access to nonhospital behavioral health care services. Among children in HSCSN (who have a disabling physical or mental health condition), nearly two-thirds of the qualifying diagnoses were for mental health or developmental disorders. One-third of children with episodic mood disorder in HSCSN did not appear to have a mental health visit (home or office based) during the year; the same was true for nearly three-fourths of children with an emotional disturbance, two-thirds of children with adjustment disorders, and more than half of children with depressive disorder.

For both Medicaid managed care enrollees and HSCSN enrollees, the capacity of specialty outpatient mental health care providers may be one factor affecting utilization, and the convenience of service locations may be another. For HSCSN enrollees, the adequacy of ancillary support for ensuring regular outpatient care visits (e.g., child care for siblings) may also contribute. Limited provider supply for Medicaid enrollees in the District is not a new issue, and District providers have pointed to the level and rate of reimbursement as the key factor influencing their participation in the program (Lurie et al., 2008b). Other financial incentives could include loan repayment and scholarship programs, such as the DC Health Professional Loan Repayment program.

A notable opportunity exists for DMH to develop systems to (a) identify individuals with significant mental health problems who are already enrolled in the system via Medicaid, MHRS, or HSCSN; (b) set standards for minimally indicated care based on diagnoses; and (c) regularly track progress toward ensuring that enrollees receive minimally indicated services.

Priority Area 3: Improve the availability and accessibility of substance abuse treatment services.

Adult District residents have unmet need for substance abuse treatment services. Characterizing use of substance abuse treatment services in the District is difficult because APRA has historically lacked the technological and data infrastructure to track use of services. Nonetheless, we have some estimates of unmet need for substance abuse treatment from household survey data. Alcohol-related conditions were more prevalent among District adults compared to the adults nationwide, and District residents were more likely than others nationally to report needing, but not receiving, specialized treatment for alcohol dependence or abuse. In 2007 and 2008, just under 10 percent of District residents reported an unmet need for treatment for alcohol use. Likewise, adult District residents had significantly higher rates of drug-related disorders compared to adults nationally, and nearly 4 percent of District adults reported needing but not receiving specialized drug abuse treatment (compared to 2.3 percent nationally). Emergency department usage is a key indicator of inadequate access to substance abuse treatment, and our analysis of discharge data showed a doubling in use for 18–39 year olds over the past several years and a large increase among 40–64 year olds.

Opportunities may exist to further leverage federal Medicaid dollars for substance abuse treatment. Substance abuse services in the District are financed mainly with local dollars, although an estimated 19 percent of APRA’s clients are eligible for Medicaid (District of Columbia Official Code, 2008). More than half of all states provide substance abuse services under Medicaid, such as inpatient detoxification, pharmacy, outpatient and inpatient services beyond detoxification, and methadone maintenance. A few states are also pursuing such services as residential treatment and clinical case management.

The availability of buprenorphine treatment is also extremely limited; even though APRA reimburses for its use, Medicaid does not. As a result, District service providers do not appear to be taking full advantage of state-of-the-art treatment options, such as buprenorphine, an alternative to methadone for the treatment of opioid addiction. Buprenorphine has significant advantages over methadone. For example, buprenorphine patients can take a month’s prescription home with them and are not required to make daily visits—making treatment more convenient. Buprenorphine is also less addictive than methadone and has been shown to have a higher treatment efficacy than methadone (Johnson, 2000). However, providers are still primarily utilizing methadone for opioid treatment. Since APRA covers buprenorphine treatment and is still being underutilized, improved and expanded provider education is also needed. For example, APRA could use time at their monthly meetings with providers to highlight this treatment option.

While insufficient capacity may be one explanation for unmet need, another is the difficulty patients report with APRA’s central intake system. Service providers indicated that having a single intake site for adults was one of the primary challenges for clients accessing substance abuse services. Clients must be motivated to seek treatment, travel to the intake center to receive a voucher for services, make an appointment for services, and then travel again to receive care. Service providers indicated that many individuals are not able to successfully navigate this system. Some providers offer to escort clients through these steps, but the cost of this service is not reimbursable. Notably, APRA has begun to make strides to improve access to substance

abuse treatment for adolescents through their ASTEP program, which allows three community providers to intake adolescents and issue a voucher on site, rather than requiring them to go to APRA's intake center for a voucher. This strategy may help to counter several concerning trends in injection drug use we observed using the District's biennial survey of adolescent health, the YRBS. APRA reported that they are trying to expand intake sites for adults; however, concern about provider capacity to conduct standardized intake assessments was one of the factors limiting the expansion of the ASTEP model of intake to the adult population.

Another issue is outreach. Service providers indicated that many clients are unaware that the voucher system exists and do not know how to access substance abuse treatment services. Although APRA has recently revised its website to be more user friendly for residents, limited community outreach by APRA about how to access services might have contributed to the community's lack of awareness. It is important to note that improvements to the availability of substance abuse services and increases in the capacity of the substance abuse system are needed to ensure that large-scale systematic outreach to clients directs them to a fully functioning system of care.

Thus, the District should consider strategies to address this priority area that include leveraging Medicaid funding, increasing capacity for providing buprenorphine as a treatment option (e.g., through improved provider training and changes to the state Medicaid plan), expanding the referral and intake process for substance abuse treatment to additional locations and for all age groups (youth and adults), and increasing marketing and outreach efforts to inform clients of service locations. It should be noted that APRA reported currently preparing a state plan amendment for submission to the Centers for Medicare and Medicaid Services to expand the array of services included in the Medicaid state plan.

Priority Area 4: Increase the coordination of care for individuals with comorbid mental health and substance abuse conditions.

Care for individuals with co-occurring mental health and substance abuse is not well coordinated. A substantial fraction of individuals with mental health disorders have comorbid substance abuse issues. In the District, approximately 5,900 of the total population of roughly 17,000 MHRS clients self-reported a co-occurring substance abuse disorder. Nationwide, an estimated 5 million people with substance abuse also have a serious mental health disorder (SAMHSA, 2006).

In the District, APRA and DMH operate in separate silos and distinct structural agencies. A SAMHSA COSIG grant allowed DMH and APRA to target training of providers to care for dually diagnosed individuals, but the grant ended in 2008, and there are few ongoing coordination efforts in place. Although the grant provided substance abuse and mental health providers with training in best practices for treating individuals with co-occurring disorders, stakeholders reported several shortcomings of the COSIG grant in D.C. First, the majority of COSIG funding was routed through DMH, which hired staff with experience in the mental health system to be part of the grant and provided leadership to the grant-funded activities. Stakeholders suggested that sharing dollars and leadership more equitably between the two agencies may help to better bridge future efforts by allowing paid staff from both the mental health and substance

abuse systems to be hired as part of the grant. Additionally, the District was limited in the type of assessment tool that could be utilized because of the capacity of the provider community. Professionalizing the substance abuse workforce should be a priority for the District.

Further, stakeholders report that there is little communication between substance abuse and mental health providers caring for the same patient. In addition, systems for tracking individuals who use services through each agency are not linked, nor are systems that providers use to become credentialed or to bill for their services. HIPAA has been cited as one cause of such restrictive flow of information between providers and across agencies. HIPAA in general does not restrict communication between medical facilities for health-related purposes, but often there is some misunderstanding about the scope of HIPAA and its applications for the behavioral health population. Since APRA and DMH are part of the D.C. government health system, an interagency memorandum or agreement could be signed to share data and information across agencies. Many of these same issues were identified elsewhere.

For example, in the Building Bridges initiative, RAND researchers produced in-depth case studies of efforts to provide better care for co-occurring disorders at the system and local levels in nine states (Pincus et al., 2005). The authors emphasized that both cultural and administrative factors facilitate effective organizational integration. Consensus-building between mental health and substance abuse agencies and combined training facilitated this effort. Medicaid financing, improvements in data-sharing, and engaging in joint data collection were also important factors that facilitated organizational integration. Monitoring service utilization across different systems is inherently difficult because many states do not have integrated databases. Factors found to impede coordination included mismatches between programs and resources, the lack of working in the same umbrella agency, funding shortages, and differences in organizational philosophies between state mental health and substance abuse programs. To build on these lessons learned, the District could offer regular co-training opportunities for mental health and substance abuse providers to learn best practices for treating individuals with co-occurring disorders, expand Medicaid financing to include billing codes for treating individuals with dual diagnoses, and improve the data infrastructure to allow DMH and APRA to share information.

Additional information on how four of those states, Connecticut, Minnesota, South Carolina and Arizona, promoted coordination of care for individuals with co-occurring disorders is described below:

Arizona: Arizona's Division of Behavioral Health Services recently implemented the use of a standardized intake instrument for all provider agencies that includes comprehensive mental health and substance abuse modules. These modules are entered into a management information system that links across mental health and substance abuse services, both Medicaid and non-Medicaid. The state is working on incorporating measures of co-occurring disorder diagnoses and services into these systems.

Connecticut: Connecticut's efforts to coordinate mental health and substance abuse services began in the late 1990s under the leadership of a strong Department of Mental Health and Addiction Services (DMHAS) commissioner. A major component of the co-occurring initiative

was to help providers become competent in screening for both mental health and substance abuse problems; they also trained providers with a standard curriculum for treatment. Working with the Medicaid program, DMHAS developed new billing codes for Integrated Dual Diagnosis Treatment. The COSIG grant also helped to improve the state's data collection capacity, allowing it to identify populations requiring co-occurring disorder treatment using administrative data. One ongoing priority is to develop co-occurring licensure, as there are currently separate program licenses.

Minnesota: The state was awarded a COSIG grant in 2006. Prior to the award, the state—which houses both substance abuse and mental health under one umbrella agency—had started training residential treatment providers and assertive community treatment teams to provide dual-diagnosis treatment, as well as motivational interviewing and more mental health screening in the substance abuse setting. After the award, the state focused on developing infrastructure and state program standards for integrating treatment for co-occurring disorders. The state opted to provide combined training to its mental health and substance abuse professionals, despite the differences in treatment philosophies and levels of training, and found this to be a successful model. The state has found training to be most successful when it is embedded within larger programmatic initiatives.

South Carolina: In South Carolina the Department of Mental Health and the Department of Alcohol and Other Drug Abuse Services have come together to collaborate on a co-occurring disorder initiative. One major effort has been to co-locate personnel from mental health and substance abuse agencies in the same offices and to form integrated teams. The mental health and substance abuse agencies have also worked with the Medicaid FFS to create unique billing codes for co-occurring disorder treatment services (rather than using separate mental health and substance abuse billing codes). The state hopes to extend services to the non-Medicaid indigent population with co-occurring disorders and integrate Medicaid claims data systems with the mental health and substance abuse claims data.

Based on the challenges to coordination described above and the lessons learned from other states, other strategies to improve coordination in the District might include

- establishing a unified credentialing system to allow providers with capabilities to serve both mental health and substance abuse services to be dually credentialed by APRA and DMH in a streamlined process
- cross-training providers in both substance abuse and mental health screening, assessment, and treatment to increase the number of providers who can diagnose and treat individuals with co-occurring disorders and thus enable persons with dual diagnoses to obtain quality care in one locale. Incentives could be developed to encourage providers to take advantage of trainings and could be developed through existing contractual mechanisms.
- standardizing screening (e.g., a screening form that includes comprehensive mental health and substance abuse modules) and evidence-based treatments for individuals with co-occurring disorders (e.g., integrated dual disorders treatment, ACT). This would help

ensure that individuals were correctly identified and that high quality services were available across systems.

- developing a unified billing system in which providers can be reimbursed for mental health and substance abuse services through a central mechanism. This may encourage providers to become dually certified. As part of a unified billing system, the District would need to amend the Medicaid state plan to include unique billing codes for co-occurring disorder treatment services (rather than using separate mental health and substance abuse billing codes).
- developing a uniform consent form that consumers would sign at the time of initial presentation for behavioral services. This would allow information to be shared between substance abuse and mental health providers and can help overcome the ambiguities associated with HIPAA.

Priority Area 5: Fundamentally upgrade the data infrastructure of the public behavioral health care system to allow for improved monitoring of service utilization, quality of care, and patient outcomes.

The District's data infrastructure is not sufficient for adequately tracking services, monitoring quality, and following health outcomes. Data are vital to the District's ability to promote provider efficiency, enable care coordination within and across agencies, and ensure high-quality service. Key issues include the following:

- Databases maintained by DMH and APRA are not interoperable; there is no common identifier that allows for tracking individuals who use both systems. A shared identifier across the systems would greatly facilitate coordination of care.
- Until recently, APRA has had virtually no ability to consistently track individuals using APRA services or to track service utilization more generally. New data systems hold the potential for vastly improved monitoring and tracking but need considered attention and investment.
- Interoperability across databases within DMH is also limited. For example, it would be useful to track use of outpatient and inpatient services for given individuals over time, but the systems that track outpatient use (eCura) and inpatient services at St. Elizabeth's (Avatar) are not readily linkable. DMH has made progress in their ability to obtain and analyze claims data related to mental health for FFS and managed care Medicaid enrollees, but a key next step is the ability to track service use for a specific Medicaid enrollee who receives care both through DMH and directly through Medicaid. Satellite DMH databases track various other services (e.g., housing, school mental health services); integration of data across these various systems would allow DMH to track service provision and outcomes for specific patients in a comprehensive way. At a minimum, DMH should move toward an identification code that is universal across all DMH databases.
- Currently, there is no formal system for tracking unduplicated services among homeless populations with mental disorders. HMIS is run by the Community Partnership for the Prevention of Homelessness and allows the city to analyze trends in homelessness and

service provision.²⁰ Burt and Hall (2009) found that improvements were needed to HMIS to assist in the management and coordination of homeless services in the District; specifically, data integrity in HMIS needs improvement, and HMIS should be made accessible to service providers to enable them to see clients' utilization history. In addition, improved linkage is also needed between the HMIS and DMH-specific data systems (e.g., eCura, Avatar).

- Many of the databases do not collect robust-enough information for strategic planning or performance measurement. For example, the school-based program contains students' names but little else in terms of the type of care delivered, and existing claims databases are not sufficient for tracking changes in the mental health or physical well-being of MHRs enrollees. Better data collection would include a standard set of core indicators across programs.
- As suggested in Priority Area 2, an opportunity exists for DMH to develop ways for identifying and tracking individuals with significant mental health disorders in Medicaid. Regular and systematic data downloads of Medicaid claims from DHC to DMH and consistent and timely analyses of those data are important first steps.
- Finally, regular tracking of the prevalence and incidence of behavioral health conditions through continued analysis of population-level surveys—NSDUH, NSCH, BRFSS—is needed. The permanent addition of mental health screening questions to the BRFSS should be considered.

Several states have been particularly innovative in developing data systems for tracking behavioral health care or general health care use. For example, Washington created a state data warehouse to link records across the Medicaid program, the Department of Human Services, and data from the Department of Corrections. This enabled them to follow the outcomes of people with a mental disorder diagnosis between 1998 and 2002 and to estimate cost savings from treatment (Mancuso and Estee, 2003). In addition, Oklahoma modernized the Medicaid information system by creating portals for all behavioral health providers to access client records in real time. This system is also integrated with the Department of Mental Health and Substance Abuse Services through a common data warehouse. (ODMHSAS, 2006)

Other Challenges

In addition to these priority areas, we note several more specific areas of challenge for the public behavioral health care system.

Services for special populations: Stakeholder interviews suggest that the District lacks targeted services for special populations with mental disorders, including geriatric consumers; transitional-age youth (under 21 years old); children who are not part of CFSA; foreign language speakers in the School Mental Health Program; and gay, lesbian, bisexual, and transgender clients. Integration and coordination of such services has yet to be met.

²⁰ The Community Partnership is an independent nonprofit agency that manages D.C.'s continuum of care for the homeless, acting as an intermediary between District and federal funders and providers of homeless services. The use of HMIS is paid for by a federal technical assistance grant, and its use is required by the Department of Housing and Urban Development.

Residential treatment capacity for youth: Few places exist where youth can receive residential treatment for behavioral health problems. In his 2008 report to the court, the court monitor recommended improvements to better integrate the system of care for children with serious emotional disturbance (Jones, 2008). The recommendations included developing a common database for tracking out-of-home placements and implementing a standardized protocol for placement decisions and standards for delivery and monitoring of care. To build the capacity needed to care for youth with serious emotional disturbance, the District will need to increase its capacity to care for these high-needs youth. Financial incentives for alternative community placements were one recommendation from the court monitor on how to improve this capacity.

Housing services: The District lacks sufficient housing supports for individuals with behavioral health issues. Stakeholders described a lack of housing for individuals and families in the District with mental health and/or substance abuse problems, despite the District's efforts to address this issue. Waitlists for people in need of housing through DMH remain long, and interviewees expressed a need for more supported independent living and housing vouchers. A key repercussion is that people may remain in residential treatment or hospital settings longer than is necessary. To address these shortages, DMH is currently implementing a number of programs (e.g., the Home First rental subsidy program, the supported independent living program) aimed at improving access to permanent supportive housing for individuals with mental disorders. DMH has also partnered with the District Department of Housing and Community Development to create additional housing units that can be used to supplement current housing programs. In response to inquiries from the court monitor, DMH is also currently working on more clearly defining application processes for their Home First program and clearly identifying persons discharged from St. Elizabeth's Hospital as a priority group for housing. Additionally, DMH is working to develop a more comprehensive housing plan to quantify the need for supported housing in the District for persons with serious mental illness. This plan will require that DMH thoroughly examine the housing needs and resources available to this population. Thus, considerable progress is being made in this area, but further work is needed.

Services for individuals with developmental disabilities: The public behavioral health care system could better serve individuals with developmental disabilities. In particular, stakeholders felt that not enough attention was paid to diagnosing and treating individuals with developmental disabilities, that the Department of Disability Services (DDS) lacked resources and capacity, and that misperceptions of mental disorders resulted in individuals with disabilities being referred to CPEP when they may more appropriately be treated by other providers. Providers in the mental health focus group felt that for clients who qualify for both DDS and DMH services, one department needs to take primary responsibility. Also, since individuals may have a hard time finding proof that their developmental disability was diagnosed before age 18, mental health providers in the focus group felt that the age requirement for DDS eligibility should be relaxed. To address this issue, DMH and DDS have partnered to relocate patients with developmental disabilities from St. Elizabeth's Hospital into the community (in FY 2009, 11 patients were moved). In addition, a special team with DMH's Mental Health Services Division (MHSD) specializes in services for patients with mental disorders and mental retardation. DMH is currently considering the following next steps, recommended by their court monitor: (1) having MHSD become a provider through the DDS Medicaid waiver program, (2) strengthening the

relationships among DMH providers and DDS providers, and (3) exploring whether DMH should develop specialized crisis/emergency services for the developmentally disabled population.

Concluding Observation

Our evaluation of the District's behavioral health system identified important strengths that should serve as a foundation for further system improvement. For example, APRA's new data system holds substantial promise for improving the District's ability to track individuals with substance use disorders across providers and to monitor utilization and quality more accurately. DMH has continued to make progress in meeting the standards set as part of the terms of its court monitoring.

Despite this progress, significant challenges remain. Our assessment points to these high-level priorities for the District:

- Work to reduce unmet need for public mental health care.
- Track and coordinate care for individuals in the public system with mental health diagnoses.
- Improve the availability and accessibility of substance abuse treatment services.
- Increase the coordination of care for individuals with comorbid mental health and substance abuse conditions.
- Fundamentally upgrade the data infrastructure of the public behavioral health care system to allow for improved monitoring of service utilization, quality of care, and patient outcomes.

An important step toward addressing some of these challenges—particularly coordination of care for individuals with comorbid MH and SA diagnoses, as well as improved tracking and monitoring of individuals across the public behavioral health system—involves improved information-sharing and data system interoperability across the different agencies that comprise the D.C. behavioral health system. Improvements in these areas would represent continued progress in meeting the District's public behavioral health needs.

Bibliography

- Acosta, Joie, Janice C. Blanchard, Craig Evan Pollack, Rhondee Benjamin-Johnson, David A. Adamson, Carole Roan Gresenz, and Brendan Saloner, *Guide to the Behavioral Health Care System in the District of Columbia*, Santa Monica, Calif.: RAND Corporation, WR-777-DCDMH, 2010. As of November 16, 2010:
http://www.rand.org/pubs/working_papers/WR777/
- Addiction Prevention and Recovery Administration, “Adolescent Substance Abuse Treatment Expansion Provider Directory,” 2009. As of March 31, 2010:
[http://dchealth.dc.gov/doh/lib/doh/services/administration_offices/apr/pdf/astep_directory_8_20_09_\(2\).pdf](http://dchealth.dc.gov/doh/lib/doh/services/administration_offices/apr/pdf/astep_directory_8_20_09_(2).pdf)
- Association of American Medical Colleges (AAMC), “Medicare Disproportionate Share Payments,” 2010. As of May 20, 2010:
<http://www.aamc.org/advocacy/library/teachhosp/hosp0003.htm>
- Blake, S.M., Bingenheimer, J.B., Sami, S., Bruce, D., Shore, A., Cartwright, S., and DeSantis, A., *District of Columbia Public Schools: Youth Risk Behavior Surveillance System Trend Analysis Report, 1997–2007*, Washington, D.C.: District of Columbia Public Schools, May 2010a.
- Blake, S.M., Ledsky, R., Whycoff, V., Cleary, S.D., Castel, A.D., and Acosta Price, O., *Health and Risk Behaviors of District of Columbia Youth: The Youth Risk Behavior Survey Report, 2007*, the Office of the State Superintendent of Education (OSSE), Office of Wellness and Nutrition Services (WNS), June 2010b.
- Blanchard, J., et al., “ED Utilization by Individuals with a Mental Health Diagnosis as Compared to the Overall ED Population,” 2010 (unpublished).
- Brown, Devon, and Henry Lesansky, “Community-Oriented Correctional Health Care: HIV Testing and Discharge Planning in the D.C. Department of Corrections,” presentation at Workshop to Identify Facilitators and Barriers to HIV Testing, Institute of Medicine Committee on HIV Screening and Access to Care, April 15, 2010.
- Buck, Jeffrey, “Medicaid, Health Care Financing Trends, and the Future of State-Based Public Mental Health Services,” *Psychiatric Services*, Vol. 54, 2003, pp. 969–975.
- Burnam, M. A., and K. E. Watkins, “Substance Abuse with Mental Disorders: Specialized Public Systems and Integrated Care,” *Health Affairs*, Vol. 25, No. 3, May–June 2006, pp. 648–658.
- Burns, M. E., “Medicaid Managed Care and Cost Containment in the Adult Disabled Population,” *Medical Care*, Vol. 47, No. 10, October 2009, pp. 1069–1076.
- Burt, Martha R., and Sam Hall, *Major Recommendations: Summary Report of the Urban Institute’s Assessment of the District of Columbia’s Public Homeless System*, Washington, D.C.: The Urban Institute, 2008. As of September 29, 2010:
<http://www.urban.org/publications/411696.html>
- Busch, A. B., R. G. Frank, and A. F. Lehman, “The Effect of a Managed Behavioral Health Carve-Out on Quality of Care for Medicaid Patients Diagnosed as Having Schizophrenia,” *Archives of General Psychiatry*, Vol. 61, No. 5, May 2004, pp. 442–448.
- Centers for Disease Control and Prevention, “Youth Risk Behavior Surveillance—United States, 2007,” *Morbidity & Mortality Weekly Report (Surveillance Summaries)*, Vol. 57, No. SS-4, pp. 1–13, 2008. As of November 14, 2010:
<http://www.cdc.gov/mmwr/PDF/ss/ss5704.pdf>

- Chandra, Anita, Carole Roan Gresenz, Janice C. Blanchard, Alison Evans Cuellar, Teague Ruder, Alex Y. Chen, and Emily M. Gillen, *Health and Health Care Among District of Columbia Youth*, Santa Monica, Calif.: RAND Corporation, TR-751-CNMC, 2009. As of September 29, 2010:
http://www.rand.org/pubs/technical_reports/TR751/
- Coalition for Juvenile Justice, “Mental Health Needs of Youth and Young Offenders,” Washington, D.C., undated. As of Aug 31, 2009:
http://www.juvjustice.org/media/factsheets/factsheet_8.pdf
- Code of Federal Regulations, Title 42—Public Health, Chapter IV—Centers for Medicare and Medicaid Services, Department of Health and Human Services, Subchapter C, Part 440, Subpart B, “Sufficiency of Amount, Duration, and Scope,” September 30, 1981.
- Coffey, R. M., J. A. Buck, C. A. Kassed, J. Dilonardo, C. Forhan, W. D. Marder, and R. Vandivort-Warren, “Transforming Mental Health and Substance Abuse Data Systems in the United States,” *Psychiatric Services*, Vol. 59, No. 11, November 2008, pp. 1257–1263.
- The Community Partnership for the Prevention of Homelessness, “Homeless Management Information System,” undated. As of May 5, 2010:
http://www.community-partnership.org/cp_hmis-helpDesk.php
- Council of State Governments, “Council of State Justice Center Releases Estimates on the Prevalence of Adults with Serious Mental Illness in Jails,” Washington, D.C.: Justice Center, 2009. As of March 30, 2009:
http://consensusproject.org/jc_publications/council-of-state-governments-justice-center-releases-estimates-on-the-prevalence-of-adults-with-serious-mental-illnesses-in-jails/MH_Prevalence_Study_brief_final.pdf
- County Characteristics Resident Population Estimates File, U.S. Census Population Division, July 1, 2008. As of September 30, 2010:
<http://www.census.gov/popest/counties/asrh/CC-EST2008-agesex.html>
- County Characteristics Resident Population Estimates File, U.S. Census Population Division, July 1, 2009. As of September 30, 2010:
<http://www.census.gov/popest/counties/asrh/CC-EST2009-agesex.html>
- Court Services and Offender Supervision Agency (CSOSA), “FY 2010 Budget Request,” undated. As of March 25, 2010:
<http://www.csosa.gov/about/budget/2010/FY2010-CSOSA-Summary-Statement.pdf>
- , “CSOSA Mental Health Factsheet,” undated. As of May 20, 2010:
<http://www.csosa.gov/newsmedia/factsheets/mental-health.pdf>
- , “CSOSA Overview Fact Sheet,” 2010. As of May 20, 2010:
<http://www.csosa.gov/newsmedia/factsheets/csosa-overview-2010.pdf>
- Criminal Justice Coordinating Council, “2007 Annual Report,” 2007. As of August 24, 2009:
<http://cjcc.dc.gov/cjcc/frames.asp?doc=/cjcc/lib/cjcc/Annual-Report-2007-CJCC.pdf>
- , “Substance Abuse Treatment and Mental Health Services Integration Task Force,” undated. As of May 5, 2010:
http://www.cjcc.dc.gov/chcc/cwp/view,a,1228,q,548824,cjccNav_GID,1512,cjccNav,%7C31270%7C,.asp
- Cuellar, A. E., and D. Haas-Wilson, “Competition and the Mental Health System,” *American Journal of Psychiatry*, Vol. 166, No. 3, March 2009, pp. 278–283.
- Cuffe, S.P., Moore, C.G., and McKeown, R.E., “Prevalence and Correlates of ADHD Symptoms

- in the National Health Interview Survey,” *Journal of Attention Disorders*, Vol. 9, No. 2, November 2005, pp. 392–401.
- Dausey, D. J., H. A. Pincus, J. M. Herrell, and L. Rickards, “State Mental Health Policy: States’ Early Experience in Improving Systems-Level Care for Persons with Co-Occurring Disorders,” *Psychiatric Services*, Vol. 58, No. 7, July 2007, pp. 903–905.
- Davis, B., and J. Stelma, *Review of the Washington DC Superior Court Juvenile Drug Court Program with Recommendations for Improving Program Operations*, American University, 2001.
- District of Columbia Primary Care Association, “Slipping Through the Cracks: Closing the Gaps in the District’s Mental Health System,” 2007. As of March 31, 2010:
http://www.dcpca.org/images/stories/slipping_through_the_cracks10-16-07.pdf
- Department of Disability Services, “Developmental Disabilities Administration,” 2010. As of March 25, 2010:
<http://dds.dc.gov/dds/cwp/view,a,3,q,497003,ddsNav,|31339|.asp>
- Department of Employment Services, “2005 Annual Report,” 2005. As of May 20, 2010:
http://www.does.ci.washington.dc.us/does/lib/does/DOES_2005_Annual_Report.pdf
- Department of Mental Health, *Comprehensive Strategy: Mental Health Services to the Homeless*, 2009. As of September 29, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/homeless_services_strategy.pdf
- , “DC CSA Transition News Brief: The Transition Is Complete—Monitoring Steps Up?” 2010. As of Jun 9, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/DC_CSA_Transition_News_BriefFinalMay_2010.pdf
- , “Dixon Case,” undated. As of Jun 9, 2010:
<http://dmh.dc.gov/dmh/cwp/view,a,3,q,639222,dmhNav,%7C31262%7C.asp>
- , “DMH Overview of Services,” slideshow, 2009.
- , “Implementation Plan for the Transition and Closure of the District of Columbia Community Services Agency,” 2008. As of July 12, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/Report_to_the_Council__12-31-08_Final.pdf
- , “Level of Care Utilization System (LOCUS/CALOCUS) Evaluations,” 2009. As of March 31, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/policy/300.1A_TL-120.pdf
- , “The Mental Health Service Delivery Reform Act of 2001 (Act),” 2002. As of March 31, 2010:
http://dmh.dc.gov/dmh/lib/dmh/pdf/policy/Chapter_12_Title_22A_49_DCR_5811.pdf
- , “MHRS Services,” October 2009.
- , “Report on the Governance Options for the District of Columbia Community Services Agency (DC CSA).” 2008. As of July 12, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/Council_Report__10-1-08.__Appendix_A.pdf
- , “Saint Elizabeth’s Hospital,” undated. As of July 12, 2010:
<http://dmh.dc.gov/dmh/cwp/view,a,3,q,516064.asp>
- , “Services and Definitions,” 2001. As of March 31, 2010:
http://dchealth.dc.gov/doh/lib/doh/services/medicaid/pdf/statepln/supp._3_to_attachment

- _3.1-b.pdf
- Desai, R., J.L. Goulet, and J. Robbins, “Mental Health Care in Juvenile Detention Centers: A Review,” *Journal of the American Academy of Psychiatry and the Law*, Vol. 34, 2006, pp. 202–214.
- District of Columbia Behavioral Health Association, “Closing the District of Columbia CSAS: Steps to Ensure a Smooth Transition,” 2008. As of March 31, 2010:
<http://www.dcbha.org/news/Closing%20DCCSA%2010-31-08.pdf>
- District of Columbia Code, “Mental Health Consumers’ Rights Protection Act of 2001,” 2001. As of March 31, 2010:
http://odr.dc.gov/odr/lib/odr/doc/Mental_Health_Consumers_Rights_Protection_Act_of_2001.doc
- District of Columbia Council, “DMH Budget,” undated. As of March 24, 2010:
<http://www.dccouncil.us/media/2010%20Budget/DMH%20R2%20Q9%20-%20Training%20Institute.pdf>
- , “DMH FY2008 Budget Oversight Meeting,” undated. As of May 20, 2010:
<http://www.dccouncil.us/media/2009%20Budget%20Documents/FY%2008%20Oversight%20Question%2049.pdf>
- District of Columbia Department of Corrections, “DOC Reimbursement for Federal Prisoners,” 2008. As of May 20, 2010:
http://doc.dc.gov/doc/frames.asp?doc=/doc/lib/doc/program_statements/2000/ps_2120_2_B_Reimbursement_for_Federal_Prisoners_22908.pdf
- , “Facts and Figures,” 2009. As of May 20, 2010:
<http://doc.dc.gov/doc/frames.asp?doc=/doc/lib/doc/populationstats/DCDepartmentofCorrectionsFactsnFiguresJun09.pdf>
- , “Testimony of Devon Brown,” 2009. As of May 20, 2010:
<http://newsroom.dc.gov/show.aspx?agency=doc§ion=4&release=16330&year=2009&file=file.aspx%2frelease%2f16330%2fPerformanceOversightHearingMarch42009.pdf>
- D.C. Department of Health Care Finance, *Working Together for Health: Medicaid Annual Report FY 2008*, Washington, D.C.: Government of the District of Columbia, undated. As of September 30, 2010:
http://dhcf.dc.gov/dhcf/lib/dhcf/information/publications/dhcf_2008_final_annual_report.pdf
- District of Columbia Office of the Chief Financial Officer (OCFO), “FY2011 Budget Update,” 2010. As of May 20, 2010:
http://cfo.dc.gov/cfo/frames.asp?doc=/cfo/lib/cfo/budget/2011/volume_3_-_agency_chapters_part_ii_web.pdf
- District of Columbia Official Code, “Choice in Drug Treatment Act of 2000,” 2008. As of May 20, 2010:
http://doh.dc.gov/doh/frames.asp?doc=/doh/lib/doh/services/administration_offices/apr/pdf/choice_in_drug_treatment_act.pdf
- , “Department of Mental Health Establishment Amendment Act of 2001,” 2001. As of July 12, 2010:
<http://dmh.dc.gov/dmh/lib/dmh/home/dmhmenheallegenroll.pdf>
- District of Columbia Register, “Department of Mental Health Establishment Rule Act,” 2002. As of April 4, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/policy/Chapter_12_Title_22A

- _49_DCR_5811.pdf
- Dixon et al. v Fenty et al.*, Civil Action No. 74-285.
- Executive Office of the Mayor, “Fenty Announces New Supportive Housing for People with Mental Illness,” Washington, D.C., May 1, 2008. As of February 15, 2010:
<http://mayor.dc.gov/DC/Mayor/About+the+Mayor/News+Room/Press+Releases/Fenty+Announces+New+Supportive+Housing+for+People+with+Mental+Illness>
- Fazel, Seena, Parveen Bains, and Helen Doll, “Substance Abuse and Dependence in Prisoners: a Systematic Review,” *Addiction*, Vol. 101, 2006, pp. 181–191.
- Fisher, W. H., B. Dickey, S. L. Normand, I. K. Packer, A. J. Grudzinskas, and H. Azeni, “Use of a State Inpatient Forensic System under Managed Mental Health Care,” *Psychiatric Services*, Vol. 53, No. 4, April 2002, pp. 447–451.
- Garnick, D. W., M. T. Lee, C. M. Horgan, and A. Acevedo, “Adapting Washington Circle Performance Measures for Public Sector Substance Abuse Treatment Systems,” *Journal of Substance Abuse Treatment*, Vol. 36, No. 3, April 2009, pp. 265–277.
- Government of the District of Columbia, “Notes on the Meeting for the Interagency Council on Homelessness,” 2008. As of March 24, 2010:
http://dhs.dc.gov/dhs/lib/dhs/pdfs/foia/ich_meeting_notes_2-14-08.pdf
- Gresenz, Carole Roan, Janice C. Blanchard, Teague Ruder, Shallon Craddock, and Nicole Lurie, *Serving the Underserved: A Mid-Course Evaluation of Montgomery Cares*, Santa Monica, Calif.: RAND Corporation, TR-683-PCCM, 2009. As of September 29, 2010:
http://www.rand.org/pubs/technical_reports/TR683/
- HCUP CCS, Healthcare Cost and Utilization Project (HCUP), Rockville, Md.: Agency for Healthcare Research and Quality, last modified December 16, 2009. As of September 29, 2010:
<http://www.hcup-us.ahrq.gov/toolssoftware/ccs/ccs.jsp>
- Health Services for Children with Special Needs Inc, “Enrollee Handbook,” 2009. As of March 31, 2010:
<http://www.hscsn-net.org/pdfs/CASSIPHndBk.pdf>
- Homeless Services Planning and Coordination Committee, “The 2009 Count of Homeless Persons in Shelters and on the Streets in Metropolitan Washington,” 2009. As of March 31, 2010:
<http://www.mwcog.org/uploads/pub-documents/zVZeVw20090513103355.pdf>
- , *Homeless Enumeration for the Washington Metropolitan Region 2009*, Washington, D.C.: Metropolitan Washington Council of Governments, May 13, 2009.
- Howell, E., *Access to Children’s Mental Health Services Under Medicaid and SCHIP*, Washington, D.C.: Urban Institute, 2004.
- Interagency Council on Homelessness, “Interagency Council on Homelessness Members,” undated. As of May 5, 2010:
<http://ich.dc.gov/ich/cwp/view,A,1394,Q,575662.asp>
- Johnson, K., *Performance Based Contracting: Some Things to Consider*, Philadelphia, Pa.: Treatment Research Institute, undated.
- Jones, Dennis R., “Final Court-Ordered Plan,” 2001. As of July 12, 2010:
<http://dmh.dc.gov/dmh/lib/dmh/home/dmhplan.pdf>
- , “Report to the Court,” July 31, 2008. As of September 30, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/dixon_court_monitor_report_08-08.pdf

- , “Report to the Court,” July 28, 2010. As of September 29, 2010:
http://dmh.dc.gov/dmh/frames.asp?doc=/dmh/lib/dmh/pdf/dixon_court_monitor_report_7-10.pdf
- Kaiser Family Foundation, “Federal Medicaid Disproportionate Share Hospital (DSH) Allotments,” undated. As of May 20, 2010:
<http://www.statehealthfacts.org/comparetable.jsp?ind=185&cat=4>
- Kaiser Family Foundation, “State Health Facts: District of Columbia,” 2008. As of September 30, 2010:
<http://www.statehealthfacts.org/profileind.jsp?ind=134&cat=3&rgn=10&cmprgn=1>
- Kaye, N., *Medicaid Managed Care: Looking Forward, Looking Back*, Portland, Me.: National Academy for State Health Policy, 2005.
- Lamb, Richard H., and Linda E. Weinberger, “Persons with Severe Mental Illness in Jails and Prisons: A Review,” *Psychiatric Services*, Vol. 49, 1998, pp. 483–492.
- Larrabee, Brandon, “State Board Looks at Privatizing Mental Hospitals: The Department of Human Services Is Reviewing Options,” *Florida Times-Union*, 2008.
- Levit, K. R., C. A. Kassed, R. M. Coffey, T. L. Mark, E. M. Stranges, J. A. Buck, and R. Vandivort-Warren, “Future Funding for Mental Health and Substance Abuse: Increasing Burdens for the Public Sector,” *Health Affairs*, Vol. 27, No. 6, November–December 2008, pp. w513–w522.
- Lurie, Nicole, Carole Roan Gresenz, Janice C. Blanchard, Teague Ruder, Anita Chandra, Bonnie Ghosh-Dastidar, Amber Price, Bruce Siegel, Marsha Regenstien, Donna Sickler, Bonnie Norton, and Karen Jones, *Assessing Health and Health Care in the District of Columbia*, Santa Monica, Calif.: RAND Corporation, WR-534, 2008a. As of September 27, 2010:
http://www.rand.org/pubs/working_papers/WR534/
- Lurie, Nicole, Carole Roan Gresenz, Janice C. Blanchard, Anita Chandra, Barbara O. Wynn, Kristy Gonzalez Morganti, Teague Ruder, Amber Price, Donna Sickler, Bonnie Norton, Karen Jones, Marsha Regenstien, and Bruce Siegel, *Assessing Health and Health Care in the District of Columbia: Phase 2 Report*, Santa Monica, Calif.: RAND Corporation, WR-579, 2008b. As of September 27, 2010:
http://www.rand.org/pubs/working_papers/WR579/
- The MacArthur Foundation Network on Mental Health Policy Research, *Transformation of a Behavioral Health System: The New Mexico Evaluation Project*, Chicago, Ill.: The MacArthur Foundation Network on Mental Health Policy Research, 2005.
- Maglione, Margaret, and Susan Ridgely, “Is Conventional Wisdom Wrong? Coverage for Substance Abuse Treatment under Medicaid Managed Care,” *Journal of Substance Abuse Treatment*, Vol. 30, 2006, pp. 285–290.
- Makenta, E., and A.I. Haynes, “Budget Justification FY2010,” DMH, undated. As of May 20, 2010:
<http://www.dccouncil.us/media/2009%20Budget%20Documents/FY%2010%20Budget%20Question%2014bdefhi.pdf>
- Mancuso, D., and S. Estee, *Washington State Mental Health Services Cost Offsets and Client Outcomes*, Olympia, Wash.: Washington State Department of Health and Social Services, 2003.
- Marzban, Nader, “Community-Oriented Correctional Health Care in the D.C. Department of Corrections,” *Correctional Healthcare*, September 24, 2009.
- Mauch, D., C. Katz, and S. Smith, *Reimbursement of Mental Health Services in Primary Care*

- Settings*, Rockville, Md.: U.S. Department of Health and Human Services, 2008.
- Minton, Todd D., and William J. Sabol, *Jail Inmates at Midyear 2008*, Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics, 2009.
- Moreno C., G. Laje, C. Blanco, H. Jiang, A.B. Schmidt, and M. Olfson, “National trends in the outpatient diagnosis and treatment of bipolar disorder in youth,” *Archives of General Psychiatry*, Vol. 64, No. 9, September 2007, pp. 1032–1039.
- National Association of State Medicaid Directors, *Serving the Needs of Medicaid Enrollees with Integrated Behavioral Health Services in Safety Net Primary Care Settings*, 2008.
- National Association of State Mental Health Program Directors and National Association of State Alcohol and Drug Abuse Directors, *Financing and Marketing the New Conceptual Framework for Co-Occurring Mental Health and Substance Abuse Disorders: A Blueprint for Systems Change*, 1999.
- National Institute on Alcohol Abuse and Alcoholism, “Alcohol-Related Risk Factors Among Adults,” updated October 2009. As of September 2010:
<http://www.niaaa.nih.gov/Resources/DatabaseResources/QuickFacts/Adults/>
- National Institute of Drug Abuse, “Principals of Drug Abuse Treatment for Criminal Populations: A Research Based Guide,” 2007. As of May 20, 2010:
http://www.drugabuse.gov/PDF/PODAT_CJ/PODAT_CJ.pdf
- National Research Institute (NRI), *State Mental Health Agency Organization and Structure: 2006*, Alexandria, Va.: NASMHPH Research Institute, 2006.
- Neighbors, H.W., S.J. Trierweiler, B.C. Ford, and J.R. Muroff, “Racial Differences in DSM Diagnosis Using a Semi-Structured Instrument: The Importance of Clinical Judgment in the Diagnosis of African Americans,” *Journal of Health and Social Behavior*, Vol. 43, 2003, pp. 237–256.
- New Mexico Interagency Behavioral Health Collaborative (NM Collaborative), “New Mexico’s New Behavioral Health System of Care Receives High Marks for Access to Care,” 2006. As of May 24, 2010:
<http://www.bhc.state.nm.us/pdf/BHreviewsNR.pdf>
- NIAAA—*See* National Institute on Alcohol Abuse and Alcoholism.
- ODMHSAS—*See* Oklahoma Department of Mental Health and Substance Abuse Services.
- Office of the Secretary of the District of Columbia, “Chapter 8: Free Standing Mental Health Centers,” 1982. As of October 25, 2009:
http://os.dc.gov/os/lib/os/info/odai/title_29/title_29_chapter_8.pdf
- Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS), “The Adult Recovery Collaborative of Oklahoma,” paper presented at ISM Conference, Minneapolis, Minn., 2006.
- Ormond, Barbara A., Ashley Palmer, and Lokendra Phadera, *Uninsurance in the District of Columbia: A Profile of the Uninsured, 2009*, The Urban Institute, 2010. As of September 29, 2010:
<http://www.urban.org/uploadedpdf/412084-dc-uninsured-brief.pdf>
- Pearson, C.L., G. Locke, A.E. Montgomery, and L. Buron, “The Applicability of Housing First Models to Homeless Persons with Serious Mental Illness, Prepared for US Department of Housing and Urban Development,” 2007. As of Feb 15, 2010:
<http://www.huduser.org/Publications/pdf/hsgfirst.pdf>
- Pierre, R., “Back from Behind Bars,” *Washington Post*, September 2, 2007.
- Pincus, Harold Alan, M. Audrey Burnam, Jennifer L. Magnabosco, Jacob W. Dembosky, and

- Michael D. Greenberg, *State Activities to Improve Service Delivery Systems for Individuals with Co-Occurring Mental and Addictive Disorders*, Santa Monica, Calif.: RAND Corporation, WR-119-CSAT, 2005. As of September 27, 2010:
http://www.rand.org/pubs/working_papers/WR119/
- Pretrial Services Agency (PSA), “2008 Annual Report,” undated. As of May 20, 2010:
<http://www.dcpsa.gov/foia/PSAfoiaDocuments/PSA-Annual-Report-FY2008.pdf>
- , “New PSA Internal Program to Launch,” undated. As of Apr 7, 2010:
<http://www.pretrial.org/Docs/Documents/Introducing%20PSA%20STARS%20final.doc>
- , “Substance Abuse and Mental Health Treatment Programs for DC Superior Court Defendants,” 2008. As of May 20, 2010:
<http://www.pretrial.org/Docs/Documents/Bfst%20DCSCTx121008.pdf>
- “Public Oversight Roundtable on the Addiction Prevention and Recovery Administration,” Testimony of T. Fernandez-Whitney, 2009.
- Romzek, Barbara, and Jocelyn Johnston, “State Social Services Contracting: Exploring the Determinants of Effective Contract Accountability,” *Public Administration Review*, Vol. 65, No. 4, 2005.
- SAMHSA—see Substance Abuse and Mental Health Services Administration.
- Savelle, Terry, Gail Robinson, and Sarah Crow, *Contracting for Public Mental Health Services: Opinions of Managed Behavioral Health Care Organizations*: U.S. Department of Health and Human Services, 2000.
- Scott, C., “DMH School Mental Health Program: Early Intervention Service to Reduce Barriers to Learning,” School Mental Health Program, 2008.
- Shirk, Cynthia, *Medicaid and Mental Health Services*: National Health Policy Forum, 2008.
- Social Security Administration, “Mental Disorders,” 2008. As of Feb 12, 2010:
<http://www.ssa.gov/disability/professionals/bluebook/12.00-MentalDisorders-Adult.htm>
- , “State Assistance Programs for SSI Recipients,” 2009. As of Feb 15, 2010:
http://www.socialsecurity.gov/policy/docs/progdsc/ssi_st_asst/2009/#highlights
- SOME (So Others Might Eat), “Addictions Recovery,” 2010. As of May 20, 2010:
http://www.some.org/services_recovery_addiction.html
- Strine, T.W., A.H. Mokdad, L.S. Balluz, O. Gonzalez, R. Crider, J.T. Berry, and K. Kroenke, “Depression and Anxiety in the United States: Findings from the 2006 Behavioral Risk Factor Surveillance System,” *Psychiatric Services*, Vol. 59, December 2008, pp. 1383–1390
- Substance Abuse and Mental Health Services Administration, “Current Statistics on the Prevalence and Characteristics of People Experiencing Homelessness in the United States,” updated April 9, 2010. As of September 29, 2010:
<http://homelessness.samhsa.gov/ResourceFiles/ba43vnnd.9.10.pdf>
- , “Learn About WITS,” undated. As of March 31, 2010:
<http://www.feinfo.com/wits-center/learn-about-wits>
- , *Results from the 2005 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies, NSDUH Series H-30, DHHS Publication No. SMA 06-4194), Rockville, Md.: Substance Abuse and Mental Health Services Administration, 2006.
- , *State Estimates of Substance Use from the 2007–2008 National Surveys on Drug Use and Health*, Office of Applied Studies, last updated June 10, 2010a. As of September 29, 2010:
<http://www.oas.samhsa.gov/2k8State/toc.cfm>

- _____, “State ATR Descriptions,” 2007. As of May 20, 2010:
<http://atr.samhsa.gov/stateprograms.aspx>
- _____, “State Summaries,” 2009. As of May 20, 2010:
<http://www.samhsa.gov/StateSummaries/StateSummaries.aspx?state=dc&year=2007>
- _____, “Substance Abuse Prevention and Treatment Block Grant,” 2010b. As of May 20, 2010:
<http://tie.samhsa.gov/SAPT2010.html#KeyProvisions>
- _____, “The NSDUH Report: Adults with Co-Occurring Serious Mental Illness and a Substance Abuse Disorder,” June 23, 2004. As of September 9, 2010:
<http://www.oas.samhsa.gov/2k4/coOccurring/coOccurring.htm>
- U.S. Census Bureau, American Community Survey, last updated September 28, 2010. As of September 30, 2010:
<http://www.census.gov/acs/www/>
- United States Department of Justice Bureau of Justice Assistance, “Residential Substance Abuse Treatment for State Prisoners (RSAT) Program,” undated. As of March 25, 2010:
<http://www.ojp.usdoj.gov/BJA/grant/rsat.html>
- United States District Court for the District of Columbia, “USA v. The District of Columbia Settlement Agreement, Civ. No. 07,” 2007. As of July 12, 2010:
http://www.justice.gov/crt/split/documents/st_elizabeths_settle_5-11-07.pdf
- Verdier, J., and A. Barrett, “How Medicaid Agencies Administer Mental Health Services: Results from a 50-State Survey,” *Psychiatric Services*, Vol. 59, No. 10, October 2008, pp. 1203–1206.
- Zerger, Suzanne, *Substance Abuse Treatment: What Works for Homeless People? A Review of the Literature*, National Health Care for the Homeless Council, June 2002. As of September 29, 2010:
<http://www.nhchc.org/Publications/SubstanceAbuseTreatmentLitReview.pdf>
- Zuvekas, Samuel, Agnes Rupp, and Grayson Norquist, “Cost Shifting Under Managed Behavioral Health Care,” *Psychiatric Services*, Vol. 58, 2007, pp. 100–108.
- Zweig, J., M. Schaffer, and G. Moore, *Addressing Co-Occurring Mental Health and Substance Abuse Disorders in the Criminal Justice System: Guiding Principles and District of Columbia Practices*, Urban Institute, 2004.

Appendix A. Analytic Methods for Chapter 3

Statistically Significant Differences Between D.C. Prevalence Estimates and the U.S. Estimate

We classified District prevalence estimates as being statistically different from the U.S. estimate if the District's 95 percent confidence interval did not overlap the U.S. confidence interval. Tables D.1, D.3, and D.5 contain both sets of confidence intervals.

Estimating Statistically Significant Changes over Time in Prevalence

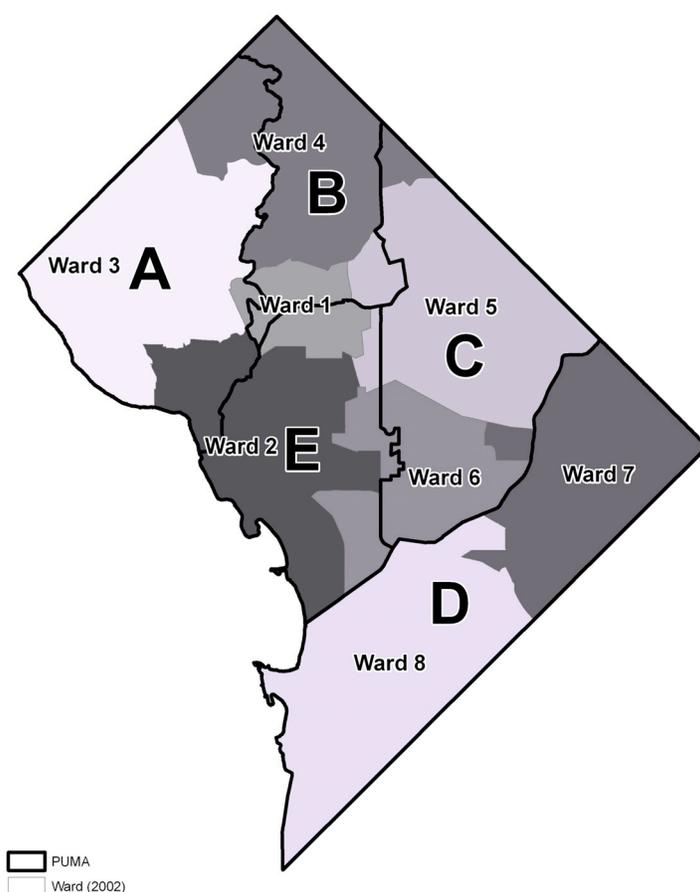
Depending on the type of data available to us we estimated trends in prevalence over time using person-level data, or compared prevalence estimates at two points in time using aggregate statistics.

- For the NSDUH survey, we compared 95 percent confidence intervals around the prevalence estimates from the earliest survey wave in which the item was included with confidence intervals from the most recent survey wave. Confidence intervals that did not overlap indicated statistically significant changes over time between the two waves. Because the results from the 2000–2001 pooled NSDUH surveys had results that were significantly outlying compared to other waves, we excluded this data point so as to avoid drawing spurious conclusions about changes in prevalence.
- For the YRBS survey, we used the results from a recently published analysis of trends in alcohol and drug use measures conducted on behalf of the District of Columbia Public Schools (Blake et al., 2010a). For additional methodological details, we refer the reader to that report.
- For the BRFSS survey, we analyzed person-level data from yearly waves of the survey. We used linear probability models and tested for both linear and quadratic trends in prevalence.

Appendix B. Summary of Variation Within the District in the Prevalence of Mental Health and Substance Abuse Disorders

As described elsewhere (Lurie et al., 2008a), the District has a heterogeneous population. Geographically, the District is divided into eight wards (Figure B.1), and much of the variation in income and race within the District occurs along geographic lines.

Figure B.1: District of Columbia Ward and Public Use Microdata Area Map



For example, residents of Ward 3 are the most well off economically, with the fewest families in poverty and the highest median family income of all the wards. Conversely, Wards 7 and 8 have the greatest percentages of residents living in poverty and the lowest median family incomes. In Wards 1 and 6, approximately 20 percent of residents live in poverty, although median family incomes are substantially higher than in Wards 7 and 8, reflecting more income diversity. Wards 4, 5, 6, 7, and 8 are predominantly African-American, and Wards 5, 7 and 8 have the highest percentages of African-Americans. Ward 1 has the greatest proportion of Hispanics (nearly a quarter of the population).

We explored differences in the prevalence of mental health and substance abuse disorders across geographic areas within the District, given the substantial differences in sociodemographic characteristics across the city. But estimating prevalence rates for very small areas is challenging because few surveys have a large enough number of observations in any ward to allow for estimation of prevalence rates with much precision, despite the pooling of data across multiple survey waves. Nonetheless, we used available data to derive estimates.

Tables D.2, D.4, and D.6 provide estimates (and confidence intervals for estimates) for the prevalence of mental health and substance abuse conditions at the ward level. Although there was substantial variation in the “point estimates” of prevalence rates across wards, statistically significant differences were few, given the wide confidence intervals around the estimates. We defined statistically significant differences as any ward-level estimate whose 95 percent confidence interval did not overlap the confidence interval surrounding the District-wide estimate. In addition, it is worth noting again that the ward-specific estimates are based on household surveys; the next section takes up the issue of nonhousehold populations and prevalence. Some key findings are as follows:

- The prevalence of severe depression symptoms was significantly lower in Ward 3 than the D.C. average (0.9 percent versus 3.1 percent), and the prevalence of moderate or severe symptoms was significantly lower in Ward 2 (4.2 percent versus 8.0 percent for the District overall).
- Lifetime diagnosis of depression was highest in Ward 1 (24 percent) compared to the District average of 15 percent. In Ward 8, the prevalences of a lifetime diagnosis of depression (8.9 percent) and anxiety disorder (5.0 percent) were both lower than the D.C. average (15.0 percent and 9.5 percent, respectively). Given the low socioeconomic status of Ward 8 residents, these lower rates of lifetime diagnosis might reflect underdiagnosis of these conditions, because these estimates were based on receiving a diagnosis of each condition from a physician.
- Alcohol-related disorders were more highly prevalent in Wards 1, 2, and 3, comprising mainly affluent residents, and were below the District average in Wards 5 and 7.
- Rates of heavy drinking were above average in Wards 2 and 3 (10.1 percent and 9.2 percent versus 5.3 percent on average across the District) and lower in Wards 5 and 7 (2.6 percent and 0.8 percent, respectively).
- The prevalence of binge drinking was higher in Wards 1 and 2, while residents of Wards 4, 5, and 7 had lower rates on average. We found neither differences in the prevalence of alcohol dependence or abuse in the past year between wards nor differences in the prevalence of inadequate treatment for alcohol dependence or abuse.
- We found no statistically significant ward-level differences in prevalence of drug use or abuse.

Appendix C. Analytic Methods Used to Assess Behavioral Health Care Utilization

Analyses of MHRS Enrollees

- **Nonusers:** We excluded individuals who were authorized to receive services but did not appear to have utilization during fiscal years 2008 or 2009. We also excluded adults greater than age 65 because they represented a small fraction of the sample and utilization patterns differ significantly by age.
- **Defining “active” diagnoses:** While all individuals enrolled in MHRS have severe mental illness, the diagnoses for which enrollees were receiving treatment included both SED/SMI and non-SED/SMI. We used Axis I disorders reported on enrollees’ authorization plans to define each enrollee’s active diagnoses. To facilitate interpretation of utilization patterns, we classified individuals into mutually exclusive diagnosis groups and reported all results using these categories. Because enrollees might have multiple Axis I disorders indicated on each authorization plan, we assigned enrollees to a single qualifying diagnosis using a categorization system that was both hierarchical and frequency-based. First, any individual with an Axis I code of a psychotic disorder was classified as such regardless of any other Axis I codes. Among the remaining individuals we identified anyone with diagnoses of bipolar disorders. For the remaining individuals—those with active diagnoses that were not SED/SMI—we used a frequency-based approach; the diagnosis code associated with the most number of visits was considered the individual’s active diagnosis.
- **Identifying specific procedures:** We used HCPCS codes to identify specific procedures or services delivered to MHRS enrollees: Medication/Somatic Treatment (T1502); Counseling and Psychotherapy (H0004); Community Support (H0036); Diagnostic/Assessment (T1023); Day Rehabilitative Services (H0025); Intensive Day Treatment (H2012); Crisis and Emergency Services (H2011); Community-Based Intervention (DMH21, H2022); Assertive Community Treatment (H0039); Other (DMH20, DMH22, DMH24, T2022, H0002, H2033)
- **Inpatient utilization at psychiatric facilities** is available through eCura’s quarterly event reporting module. Relevant data fields include the facility name and admission and discharge dates. We were unable to use this information because of the high rate of missing data that could have caused us to significantly understate the true rate of inpatient utilization or potentially double-count inpatient stays because of incomplete information on dates of services.

MCO Analyses

- **Patient cohort:** Our cohort comprised individuals enrolled in any managed care plan operating in the District during FY 2007–2009 who had a diagnosed mental health condition and who received services during the year. The analyses presented in Chapter 4 reflect utilization for which a mental health diagnosis was included on the claim. In Tables D.7 and D.8, we report results that include all utilization for each enrollee who used mental health services whether or not a mental health diagnosis was reported on the claim for each visit.

- **Identifying mental health conditions:** We used the Clinical Classifications Software (CCS) to map ICD-9 diagnosis codes reported on each claim into higher-level diagnostic categories. For details of this algorithm, see HCUP CCS, 2009. We then grouped related CCS categories (coded 5.X) into a small number of categories to facilitate reporting. “Severe mental illness” included code 5.8.1 (bipolar disorders) and 5.10 (schizophrenia and other psychotic disorders). We assigned categories using the following codes: depressive disorders (5.8.2), adjustment disorders and anxiety disorders (5.1 and 5.2); attention deficit, conduct, and disruptive behavior disorders (5.3); “all MH conditions” (all CCS codes in 5.XX, with the exception of 5.4 [dementia], 5.5 [developmental disorders], 5.11 [alcohol-related disorders], and 5.12 [substance-related disorders]).
- We used Current Procedural Terminology (CPT) codes to identify utilization occurring in distinct settings.
 - For **inpatient stays**, we used the following CPT codes corresponding to both mental health specific and general procedures: 99238, 99239, 99221, 99222, 99223, 99231, 99232, 99233, 99251, 99252, 99253, 99254, 99255, 99291, 99292, 99293, 99294, 99295, 99296, 99234, 99236, 90816, and 90829. We also used inpatient indicators included in the claims data files—code 21 (inpatient hospital) and code 51 (inpatient psychiatric hospital).
 - For **outpatient visits**, we used the following CPT codes: 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99381, 99382, 99383, 99384, 99385, 99391, 99392, 99393, 99394, 99395, 99432, 99401, 99402, 99403, 99404, 99411, 99412, and 99429. For outpatient specialty care visits, we used the following codes: 99241, 99242, 99243, 99244, 99245, 90801–90803, 90804–90815, 90845–90857, and 90862. We also used place of service codes included in the claims data files: 11 (office) and 22 (outpatient hospital).
 - For **ED visits**, we used the following CPT codes: 99281, 99282, 99283, 99284, 99285, 99291, 99292, 99217, 99218, 99219, and 99220. We also used the place of service code 23 (hospital emergency department).

Appendix D. Supplemental Tables and Figures

Table D.1: Prevalence of Mental Health Conditions, by Age

		Age	Source	Year	D.C. Percent	95% Confidence Interval	U.S. Percent	95% Confidence Interval
Adults								
Depression	Moderate or severe depression symptoms ^d	18+	BRFSS	2006	8.6	7.2–10.0	9.4	9.1–9.7
	Severe depression symptoms ^b	18+	BRFSS	2006	3.3	2.3–4.3	3.9	3.7–4.1
	History of diagnosed depression ^c	18+	BRFSS	2006	15.0	13.4–16.6	15.7	15.3–16.0
	Major depressive episode in past year ^e	18+	NSDUH	2006–2007	8.1	6.6–9.8	7.3	7.0–7.6
Anxiety	History of diagnosed anxiety disorder ^c	18+	BRFSS	2006	9.5*	8.2–10.8*	11.3	11.0–11.7
Other	Serious psychological distress in past year ^d	18+	NSDUH	2006–2007	11.5	10.0–13.3	11.1	10.8–11.4
	Severe mental illness ^f	18+	NSDUH	2002	9.5	7.3–12.2	8.3	7.9–8.7
Youth (age < 18 unless otherwise indicated)								
Depression	Major depressive episode in past year ^e	12–17	NSDUH	2007–2008	7.2	5.8–8.8	8.2	7.9–8.5
	Depression symptoms index (mean) ^g	6–17	NSCH	2007	4.9	4.7–5.1	4.8	4.8–4.9
	Currently has diagnosed depression ^c	2–17	NSCH	2007	1.9	1.3–2.5	1.7	1.7–1.8
	Depression interferes with usual activity in prior 12 months	15–18	YRBS	2007	26.8	24.4–29.1	28.5	27.1–29.8
Anxiety	Currently has diagnosed anxiety disorder ^c	2–17	NSCH	2007	2.0	1.3–2.6	2.5	2.4–2.6
Suicidality	Seriously considered suicide in lifetime	12–14	YRBS	2007	23.9	21.6–26.1	–	–
	Seriously considered suicide in the prior 12 months	15–18	YRBS	2007	14.9	13.0–16.8	14.5	13.4–15.6
	Made suicide plan in lifetime	12–14	YRBS	2007	13.1	11.3–14.8	–	–
	Made suicide plan in the prior 12 months	15–18	YRBS	2007	12.1	10.3–13.9	11.3	10.4–12.3
	Attempted suicide in the prior 12 months	15–18	YRBS	2007	12.2*	10.0–14.7	6.9	6.3–7.6
	Attempted suicide and sustained injury in the prior 12 months	15–18	YRBS	2007	4.0*	2.9–5.4	2.0	1.7–2.3
Other	Attention deficit disorder or attention deficit hyperactive disorder	2–17	NSCH	2007	4.3*	3.4–5.3*	5.7	5.5–5.8
	Behavioral or conduct problems	2–17	NSCH	2007	3.9*	3.0–4.8*	2.9	2.8–3.0
	Autism or autism spectrum disorder	2–17	NSCH	2007	0.3*	0.1–0.6*	0.9	0.9–1.0
	Developmental delay problems	2–17	NSCH	2007	3.6	2.7–4.4	2.8	2.7–3.0

NOTE: BRFSS = Behavioral Risk Factor Surveillance System, NSDUH = National Survey of Drug Use and Health, NSCH = National Survey of Children's Health, and YRBS = Youth Risk Behavior Survey. Asterisks indicate statistically significant differences between D.C. and U.S. estimates at $p=0.05$ or less. We include these estimates in boldface for clarity. Frequencies for each condition were generated by multiplying each percentage by the age-specific population size obtained from the Census Bureau's American Community Survey, with the exception of the YRBS survey, which used sampling weights to estimate population frequencies. NSDUH estimates are from SAMHSA, 2010a; BRFSS estimates are from Strine et al., 2008; YRBS D.C. and national estimates are from CDC, 2008.

^a PHQ-8 score ≥ 10 .

^b PHQ-8 score ≥ 15 .

^c Respondent or respondent's parent indicates that a doctor or other health care provider has diagnosed the condition.

^d K6 score ≥ 13 . The K6 was not administered to survey respondents aged 17 and younger.

^e Major depressive episode is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had symptoms that met the criteria for major depressive disorder as described in DSM-IV.

^f Severe mental illness was defined as having at some time during the past year a diagnosable mental, behavioral, or emotional disorder that met the criteria specified in DSM-IV and resulted in functional impairment that substantially interfered with or limited one or more major life activities.

^g This index is the sum score for 3 items: Individual feels worthless or inferior; Individual is unhappy, sad or depressed; Individual is withdrawn and does not get involved with others. Each is measured on a 5-point scale.

^h Age ranges reported for YRBS estimates are approximate.

Table D.2: Prevalence of Mental Health Disorders, by Ward

	Moderate or severe depression symptoms ^a		Severe depression symptoms ^b		Lifetime diagnosis of depression ^c		Lifetime diagnosis of anxiety disorder ^c		Serious psychological distress in past year ^d		Major depression episode in past year ^e	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ward 1	9.2	2.8–15.6	5.3	0.0–11.8	23.9*	17.1–30.6	14.4	7.8–20.9	13.1	10.5–16.1	10.1	7.6–13.4
Ward 2	4.2*	2.7–5.8	1.5	0.7–2.3	17.4	14.3–20.6	9.9	7.5–12.3	13.6	11.3–16.3	10.2	7.9–13.1
Ward 3	3.9	1.3–6.6	0.9*	0.2–1.6	15.5	12.8–18.2	11.4	8.7–14.1	12.6	10.2–15.6	10.4	8.0–13.4
Ward 4	10.1	6.3–13.9	3.8	1.2–6.5	12.4	9.0–15.8	8.6	5.7–11.6	9.9	7.7–12.6	6.7	4.9–9.1
Ward 5	8.4	5.4–11.3	2.2	0.9–3.5	13.4	10.1–16.6	9.7	6.8–12.6	10.0	8.1–12.4	6.7	5.0–8.9
Ward 6	5.7	3.2–8.2	1.6	0.7–2.5	17.2	13.0–21.3	10.7	7.4–14.0	11.7	9.4–14.6	8.9	6.7–11.9
Ward 7	13.2	7.9–18.5	5.3	1.5–9.1	13.5	8.0–19.0	7.9	4.7–11.1	10.3	8.1–12.9	7.4	5.3–10.3
Ward 8	11.0	6.3–15.6	4.4	2.1–6.6	8.9*	5.4–12.4	5.0*	2.7–7.3	12.8	10.4–15.7	7.6	5.7–10.1
D.C.	8.0	6.5–9.4	3.1	2.0–4.1	15.0	13.4–16.6	9.5	8.2–10.8	11.8	10.4–13.5	8.7	7.3–10.3

NOTE: Asterisks denote statistically significant differences between the ward-level estimate and the D.C. estimate. We assessed statistical significance by comparing confidence intervals between the two sets of estimates; those that were not overlapping were determined to be significantly different at the $p=0.05$ level. These estimates are also indicated in bold for clarity. The data source was BRFSS (2006) for all measures with the exception of serious psychological distress in the past year and major depression episode in the past year, which were from NSDUH (2004–2006). The BRFSS results reflect individuals age 18 and older; NSDUH estimates reflect individuals age 12 and older.

^a PHQ-8 score ≥ 10 .

^b PHQ-8 score ≥ 15 .

^c Respondent or respondent's parent indicates that a doctor or other health care provider has diagnosed the condition.

^d K6 score ≥ 13 . The K6 was not administered to survey respondents aged 17 and younger.

^e Major depressive episode is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities and had symptoms that met the criteria for major depressive disorder as described in DSM-IV.

Table D.3: Prevalence of Alcohol Use and Abuse Disorders, by Age

	Age ^f	Source	Year	D.C.		U.S.	
				Percent	95% Confidence Interval	Percent	95% Confidence Interval
Adults							
Heavy alcohol use in past month ^a	18+	BRFSS	2008	6.3*	5.3–7.3*	5.2	5.0–5.3
Binge alcohol use in past month ^b	18+	BRFSS	2008	17.9*	16.2–19.6*	15.1	14.8–15.4
Binge alcohol use in past month ^b	18+	NSDUH	2007–2008	31.7*	28.8–34.7*	24.9	24.4–25.4
Alcohol dependence or abuse in past year ^c	18+	NSDUH	2007–2008	10.0*	8.5–11.8*	7.7	7.5–7.9
Needing but not receiving treatment for alcohol use in past year ^d	18+	NSDUH	2007–2008	9.4*	8.0–11.1*	7.3	7.1–7.5
Youth							
Alcohol use in past month ^e	15–18	YRBS	2007	32.6*	29.8–35.4*	44.7	42.4–47.0
Binge alcohol use in past month ^b	12–17	NSDUH	2007–2008	7.8	6.0–10.0	9.3	9.0–9.6
Binge alcohol use in past month ^b	15–18	YRBS	2007	12.1*	10.3–13.9*	26.0	24.0–28.0
Alcohol dependence or abuse in past year ^c	12–17	NSDUH	2007–2008	3.3*	2.5–4.3*	5.1	4.8–5.4
Needing but not receiving treatment for alcohol use in past year ^d	12–17	NSDUH	2007–2008	3.3*	2.4–4.5*	5.0	4.8–5.2

NOTE: BRFSS = Behavioral Risk Factor Surveillance System; NSDUH = National Survey of Drug Use and Health, YRBS = Youth Risk Behavior Survey. Asterisks indicate statistically significant differences between D.C. and U.S. estimates at p=0.05 or less. We include these estimates in boldface for clarity. Frequencies for each condition were generated by multiplying each percentage by the age-specific population size obtained from the Census Bureau's American Community Survey, with the exception of the YRBS survey, which used sampling weights to estimate population frequencies. NSDUH estimates are from SAMHSA, 2010a; BRFSS estimates are from Strine et al., 2008; YRBS D.C. and national estimates are from CDC, 2008.

^a Consuming 2 or more drinks per day (men) or 1 or more drinks per day (women) on average during the past month.

^b Consuming 5 or more drinks on at least one occasion during the past month.

^c Based on definitions found in DSM-IV.

^d Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

^e Respondent had at least one drink of alcohol on at least 1 day during the 30 days before the survey.

^f Age ranges reported for YRBS estimates are approximate and reflect average ages for middle school and high school students.

Table D.4: Prevalence of Alcohol Use Disorders, by Ward

	Heavy drinking in past month ^a		Binge drinking in past month (BRFSS Survey) ^b		Binge alcohol use in past month (NSDUH Survey)		Alcohol dependence or abuse in past year ^c		Needing but not receiving treatment for alcohol use in past year ^d	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ward 1	6.5	3.6–9.5	23.5*	18.6–28.4	31.0	26.2–36.1	12.1	9.3–15.6	11.5	8.8–14.9
Ward 2	10.1*	7.2–13.1	23.6*	19.6–27.5	38.9*	34.6–43.3	14.0	11.4–17.0	13.8	11.1–16.9
Ward 3	9.2*	6.2–12.1	17.8	13.9–21.6	31.1	27.0–35.6	11.8	9.2–15.0	11.8	9.4–14.7
Ward 4	3.8	2.0–5.6	9.7*	6.7–12.8	23.5	19.2–28.4	7.9	5.8–10.6	7.4	5.4–10.1
Ward 5	2.6*	1.4–3.7	11.1*	8.0–14.2	23.6	19.9–27.7	9.3	7.2–12.0	8.7	6.8–11.2
Ward 6	6.3	2.8–9.7	18.7	14.4–22.9	28.7	23.9–33.9	9.9	7.4–13.0	9.4	7.0–12.5
Ward 7	0.8*	0.2–1.5	12.3	7.9–16.7	19.7*	16.2–23.8	7.4	5.5–9.9	7.0	5.2–9.4
Ward 8	3.4	0.8–6.0	12.5	7.5–17.4	23.7	19.8–28.1	8.5	6.5–11.2	8.2	6.2–10.7
D.C.	5.3	4.3–6.2	15.8	14.2–17.4	28.0	25.7–30.4	10.3	8.9–11.9	9.9	8.6–11.5

NOTE: These estimates reflect the prevalence of each condition for people age 12 and older unless otherwise indicated. Asterisks denote statistically significant differences between the ward-level estimate and the D.C. estimate. We assessed statistical significance by comparing confidence intervals between the two sets of estimates; those that were not overlapping were determined to be significantly different at the $p=0.05$ level. These estimates are also indicated in bold for clarity. The data source was NSDUH (2004–2006) with the exception of heavy drinking and binge drinking, which were from BRFSS (2008). The BRFSS results reflect individuals age 18 and older; NSDUH estimates reflect individuals age 12 and older. We were unable to generate ward-level estimates using the YRBS data.

^a Consuming 2 or more drinks per day (men) or 1 or more drinks per day (women) on average during the past month.

^b Consuming 5 or more drinks on at least one occasion during the past month.

^c Based on definitions found in DSM-IV.

^d Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

^e Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

Table D.5: Prevalence of Drug Use and Abuse Disorders, by Age

	Age ^g	Source	Year	D.C.		U.S.	
				Percent	95% Confidence Interval	Percent	95% Confidence Interval
Adults							
Illicit drug use in past month ^d	18+	NSDUH	2007–2008	12.2*	10.3–14.4*	7.9	7.6–8.2
Marijuana use in past month	18+	NSDUH	2007–2008	9.8*	8.2–11.6*	5.9	5.7–6.1
Illicit drug use other than marijuana in past month ^d	18+	NSDUH	2007–2008	4.6	3.4–6.1	3.5	3.3–3.7
Cocaine use in past year	18+	NSDUH	2007–2008	4.5*	3.2–6.2*	2.3	2.2–2.4
Nonmedical use of prescription pain relievers in past year	18+	NSDUH	2007–2008	3.8	2.9–5.0	4.7	4.5–4.9
Illicit drug dependence or abuse in past year ^{a,b}	18+	NSDUH	2007–2008	4.5*	3.5–5.9*	2.6	2.5–2.7
Needing but not receiving treatment for illicit drug use in past year ^{a,c}	18+	NSDUH	2007–2008	3.7*	2.8–4.9*	2.3	2.2–2.4
Youth							
Illicit drug use in past month ^d	12–17	NSDUH	2007–2008	11.0	9.0–13.4	9.4	9.0–9.8
Illicit drug use other than marijuana in past month	12–17	NSDUH	2007–2008	4.3	3.2–5.6	4.5	4.4–4.6
Nonmedical use of prescription pain relievers in past year	12–17	NSDUH	2007–2008	4.1*	3.1–5.3*	6.6	6.3–6.9
Marijuana use in past month	12–17	NSDUH	2007–2008	7.2	5.7–9.0	6.7	6.4–7.0
Cocaine use in past year	12–17	NSDUH	2007–2008	0.6*	0.4–1.0*	1.4	1.3–1.5
Illicit drug dependence or abuse in past year ^{a,b}	12–17	NSDUH	2007–2008	3.8	2.9–5.0	4.5	4.3–4.7
Needing but not receiving treatment for illicit drug use in past year ^{a,c}	12–17	NSDUH	2007–2008	3.8	2.8–5.1	4.2	4.1–4.3
Ever used marijuana	12–14	YRBS	2007	17.9	15.8–20.0	–	–
Ever used marijuana	15–18	YRBS	2007	40.4	37.1–43.8	38.1	35.5–40.7
Ever used cocaine/crack	12–14	YRBS	2007	5.2	4.0–6.5	–	–
Ever used cocaine/crack	15–18	YRBS	2007	6.2	4.8–7.6	7.2	6.2–8.2
Ever used inhalant ^e	15–18	YRBS	2007	10.1*	8.4–11.7*	13.3	12.1–14.6
Ever used heroin	15–18	YRBS	2007	5.4*	4.1–6.7*	2.3	1.8–2.8
Ever used methamphetamines	15–18	YRBS	2007	6.1	4.7–7.5	4.4	3.7–5.3
Ever used Ecstasy	15–18	YRBS	2007	7.7	6.2–9.3	5.8	5.0–6.6
Ever used illegal steroids	15–18	YRBS	2007	6.5*	4.8–8.8*	3.9	3.4–4.6
Ever injected illegal drug ^f	15–18	YRBS	2007	5.5*	4.2–6.8*	2.0	1.5–2.7
Marijuana use in past month ^d	15–18	YRBS	2007	20.8	18.5–23.1	19.7	17.8–21.8
Cocaine use in past month	15–18	YRBS	2007	3.6	2.4–5.5	3.3	2.8–3.8

NOTE: BRFSS = Behavioral Risk Factor Surveillance System; NSDUH = National Survey of Drug Use and Health, YRBS = Youth Risk Behavior Survey. Asterisks indicate statistically significant differences between D.C. and U.S. estimates at p=0.05 or less. We include these estimates in boldface for clarity. Frequencies for each condition were generated by multiplying each percentage by the age-specific population size obtained from the Census Bureau's American Community Survey, with the exception of the YRBS survey, which used sampling weights to estimate population frequencies. NSDUH estimates are from SAMHSA, 2010a; YRBS D.C. and national estimates are from CDC, 2008.

^a Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

^b Based on definitions found in DSM-IV.

^c Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

^d Respondent used marijuana at least once in past 30 days.

^e Respondent sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.

^f Used a needle to inject any illegal drug into their body one or more times during their life.

^g Age ranges reported for YRBS estimates are approximate and reflect average ages for middle school and high school students.

Table D.6: Prevalence of Drug Use Disorders, by Ward

	Illicit drug use in past month ^a		Marijuana use in past month ^a		Illicit drug use other than marijuana in past month		Cocaine use in past year		Nonmedical use of prescription pain relievers in past year		Illicit drug dependence or abuse in past year ^{a,b}		Needing but not receiving treatment for drug use in past year ^d	
	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI	%	95% CI
Ward 1	12.2	9.1–16.1	8.7	6.4–11.8	4.7	3.1–6.9	4.2	2.7–6.6	4.2	2.8–6.0	4.3	2.8–6.5	3.3	2.2–4.9
Ward 2	11.9	9.4–14.9	9.3	7.2–12.0	5.1	3.6–7.0	5.2	3.7–7.3	4.8	3.5–6.5	3.7	2.7–5.2	3.0	2.2–4.3
Ward 3	7.9	5.8–10.6	6.0	4.3–8.3	3.3	2.2–5.0	3.4	2.1–5.4	4.1	2.9–5.8	2.6	1.7–3.9	2.0	1.3–3.0
Ward 4	7.7	5.6–10.6	5.4	3.8–7.6	3.3	2.1–4.9	3.2	1.9–5.3	3.1	2.1–4.5	3.2	2.0–5.1	2.2	1.4–3.5
Ward 5	10.6	8.3–13.4	7.8	5.9–10.3	4.0	2.7–6.0	4.2	2.7–6.6	3.5	2.5–5.0	5.9	3.9–8.7	4.4	2.9–6.8
Ward 6	9.9	7.3–13.3	7.2	5.1–10.2	3.8	2.5–5.7	4.2	2.6–6.7	3.4	2.3–5.0	3.9	2.6–5.9	2.8	1.9–4.3
Ward 7	7.8	5.8–10.4	6.1	4.4–8.4	2.8	1.8–4.2	2.8	1.6–4.8	2.5	1.7–3.6	4.0	2.6–6.0	3.1	2.1–4.7
Ward 8	10.6	8.3–13.5	8.0	6.1–10.6	3.7	2.6–5.4	3.1	1.9–5.1	3.2	2.3–4.5	4.8	3.3–6.9	4.2	2.9–6.1
D.C.	9.8	8.5–11.2	7.3	6.2–8.6	3.8	3.1–4.7	3.8	3.0–5.0	3.7	3.0–4.5	4.0	3.2–5.0	3.1	2.5–3.8

NOTE: These estimates reflect the prevalence of each condition for people age 12 and older unless otherwise indicated. Asterisks denote statistically significant differences between the ward-level estimate and the D.C. estimate. We assessed statistical significance by comparing confidence intervals between the two sets of estimates; those that were not overlapping were determined to be significantly different at the $p=0.05$ level. These estimates are also indicated in bold for clarity. The data source was NSDUH (2004–2006). We were unable to generate ward-level estimates using the YRBS data.

^a Illicit drugs include marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically.

^b Based on definitions found in DSM-IV.

^c Respondents are classified as needing but not receiving treatment for abuse or dependence at a specialty facility (i.e., drug and alcohol rehabilitation facilities [inpatient or outpatient], hospitals [inpatient only], and mental health centers).

Table D.7: Utilization for Medicaid MCO Enrollees with Diagnosed Mental Health Conditions, 2007–2009*

	N**	Percentage of individuals having the following types of care:							Any inpatient use	Any ED use
		Office visit only	ED only	Office visit and ED	Inpatient only	Inpatient and office visit	Inpatient and ED	Inpatient, ED, and office visit		
Children (age <18)										
Psychotic/bipolar disorders	551	60	7	12	2	7	3	9	21	31
Depression	1,398	83	7	6	1	1	1	1	5	14
Adjustment/anxiety	1,721	86	6	6	<1	<1	<1	<1	2	13
ADD/ADHD	3,012	89	4	5	<1	<1	<1	<1	2	21
All MH conditions	7,088	84	6	6	<1	1	<1	1	4	14
Adults (age ≥18)										
Psychotic/bipolar disorders	1,331	66	7	9	3	5	4	6	19	25
Depression	2,618	82	6	6	2	2	1	1	7	14
Adjustment/anxiety	1,314	76	11	7	2	<1	1	<1	5	21
All MH conditions	5,627	76	8	7	2	2	2	2	9	19

* Inpatient, outpatient, and emergency care visits include *all visits* for enrollees with mental health conditions whether or not a mental health diagnosis code was reported on the claim.

**Patient years are reported. Thus, if an enrollee had mental health utilization during all three fiscal years, the enrollee contributed three observations to the analysis.

Table D.8: 30-Day Readmission and Follow-Up Care Indicators for Medicaid MCO Enrollees, 2007–2009*

	N**	30-day hospital readmission rate (%)	Outpatient follow-up care received within 30 days of an inpatient admission (%)	N**	Outpatient follow-up care received within 30 days of an ED discharge (%)
Medicaid MCO					
Children (age <18)					
Psychotic/bipolar disorders	174	24	39	175	33
Depression	93	17	30	230	21
Adjustment/anxiety	55	33	18	218	23
ADD/ADHD	44	7	41	266	25
All MH conditions	383	22	35	974	24
Adults (age ≥18)					
Psychotic/bipolar disorders	298	21	26	338	32
Depression	206	14	16	354	25
Adjustment/anxiety	69	25	10	264	17
All MH conditions	591	18	20	1041	23

* Inpatient, outpatient, and emergency care visits include *all visits* for enrollees with mental health conditions whether or not a mental health diagnosis code was reported on the claim.

**Sample sizes refer to the number of events (inpatient admissions or ED visits) across all three fiscal years.

Figure D.1: Suicide Attempt in the Past Year (Grades 9–12), YRBS Survey

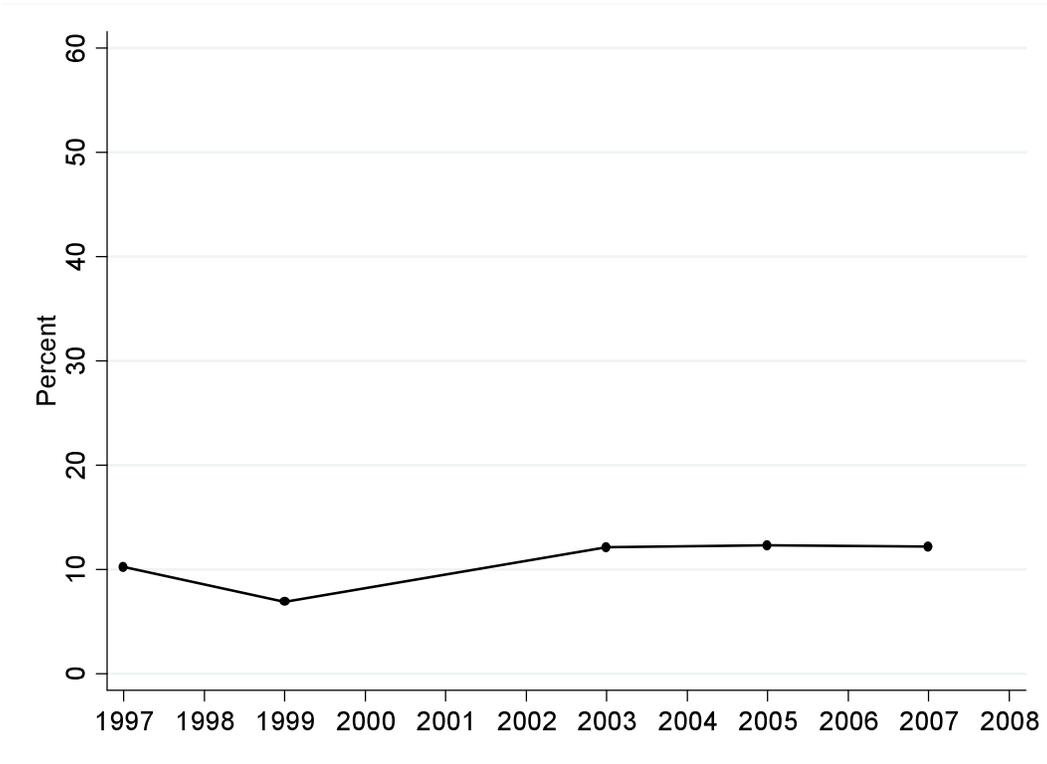


Figure D.2: Heavy Alcohol Use in the Past Month (Age 18+), BRFSS Survey

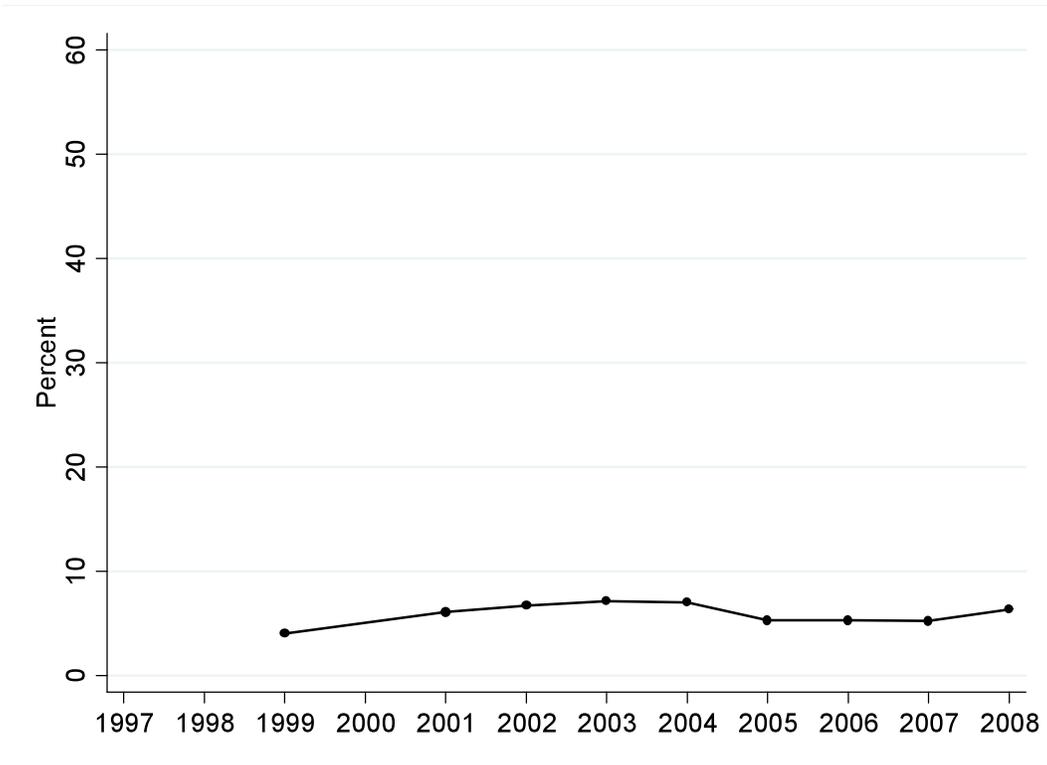


Figure D.3: Binge Alcohol Use in the Past Month (Age 18+), BRFSS Survey

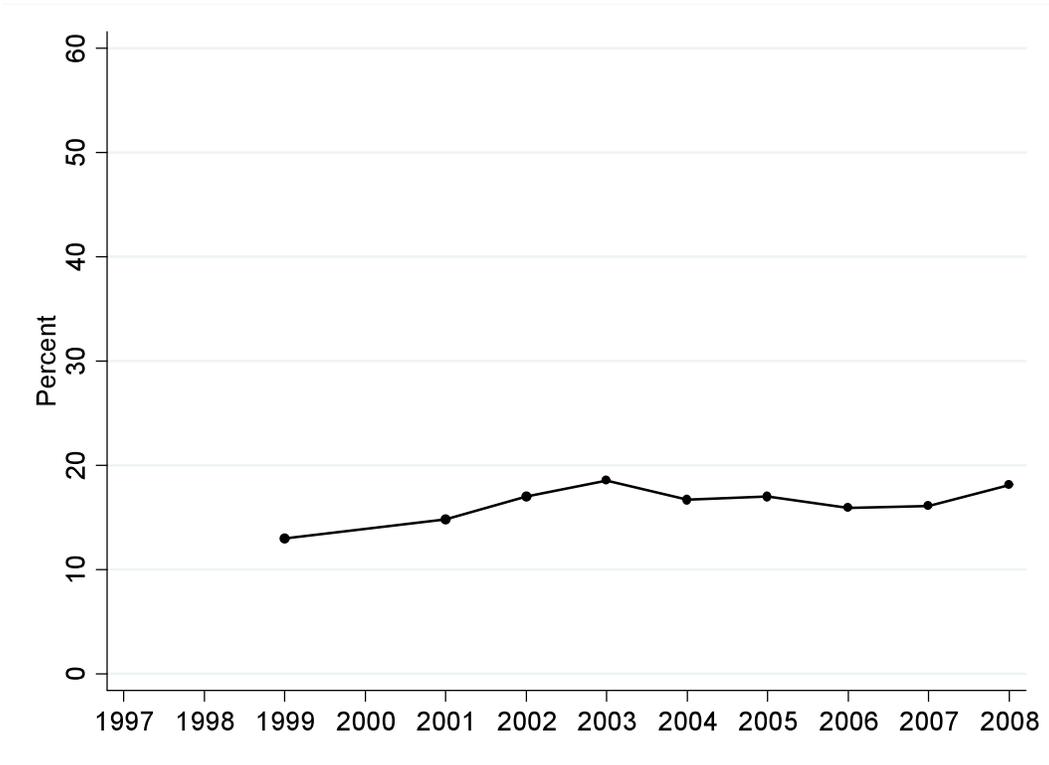


Figure D.4: Alcohol Use in the Past Month (Grades 9–12), YRBS Survey

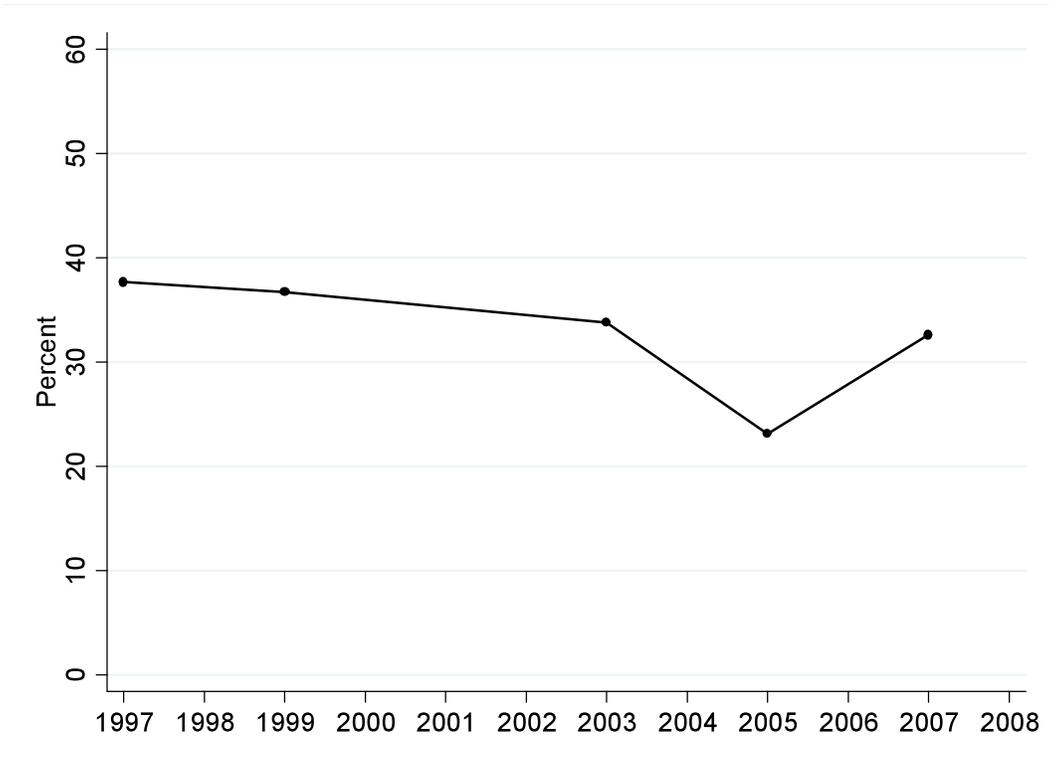


Figure D.5: Binge Alcohol Use in the Past Month (Grades 9–12), YRBS Survey

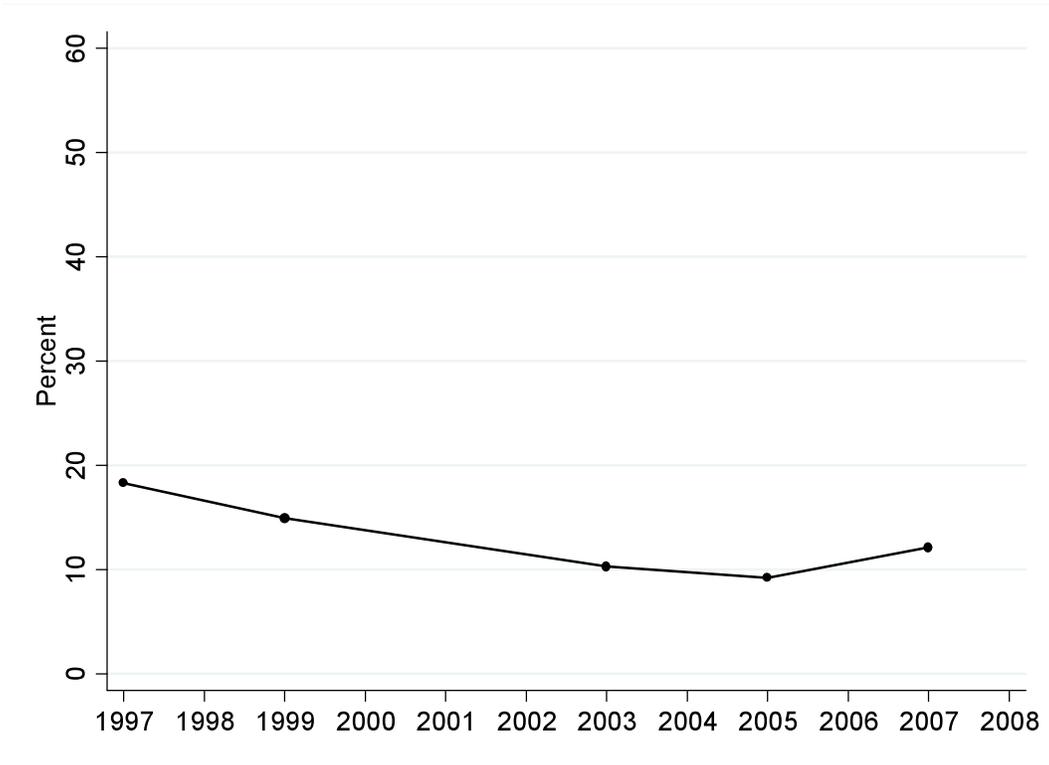


Figure D.6: Ever Used Marijuana (Grades 6–8), YRBS Survey

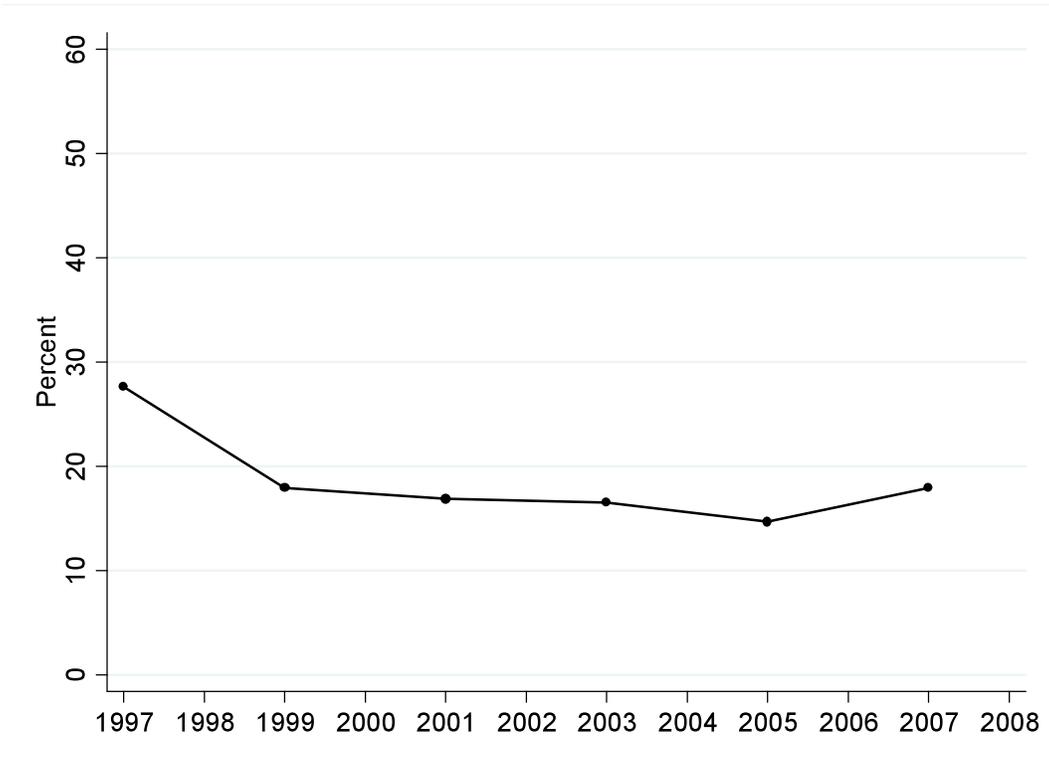


Figure D.7: Ever Used Marijuana (Grades 9–12), YRBS Survey

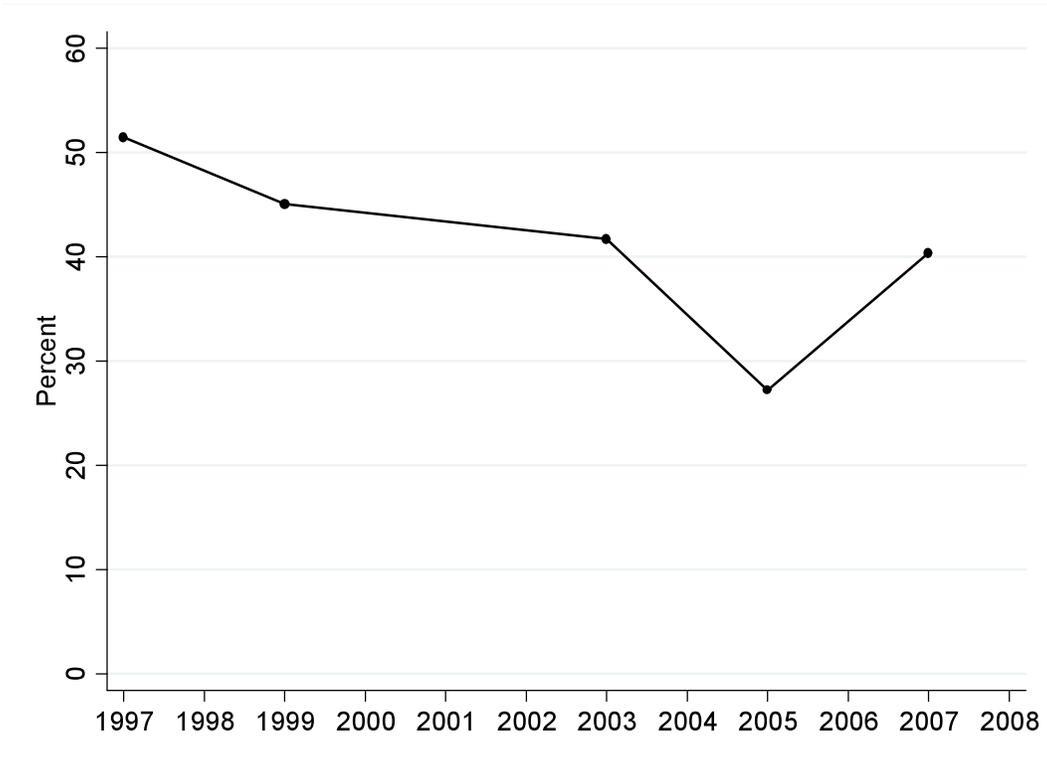


Figure D.8: Marijuana Use in the Past Month (Grades 9–12), YRBS Survey

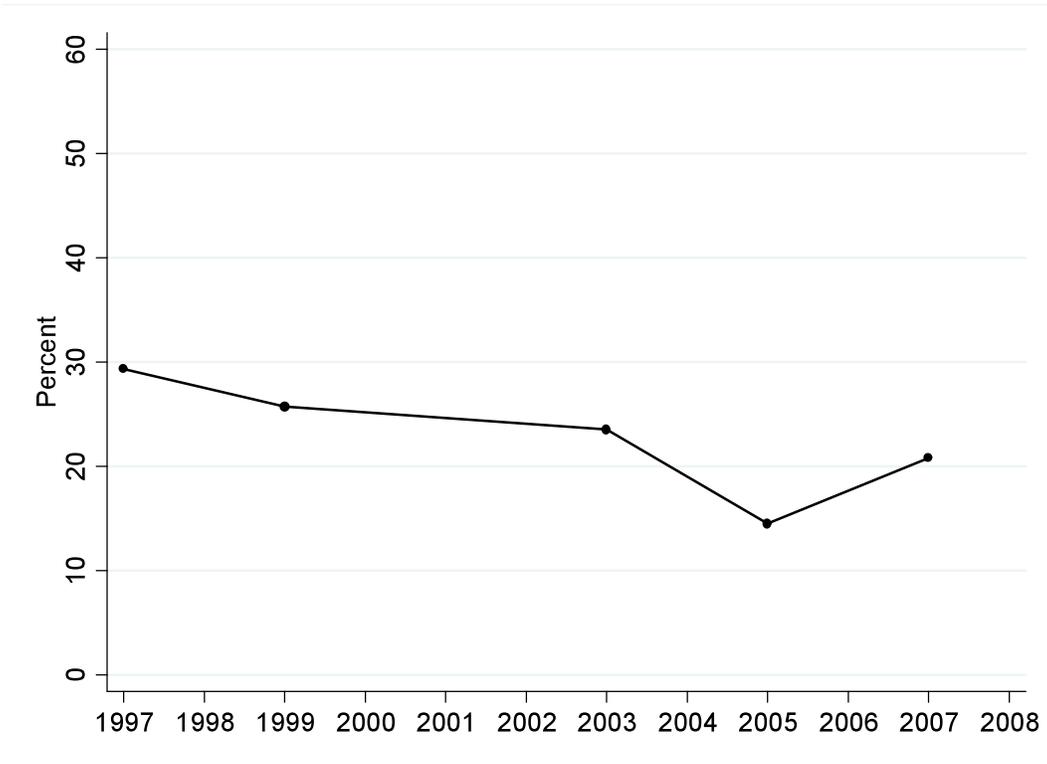


Figure D.9: Ever Injected Illegal Drug (Grades 9–12), YRBS Survey

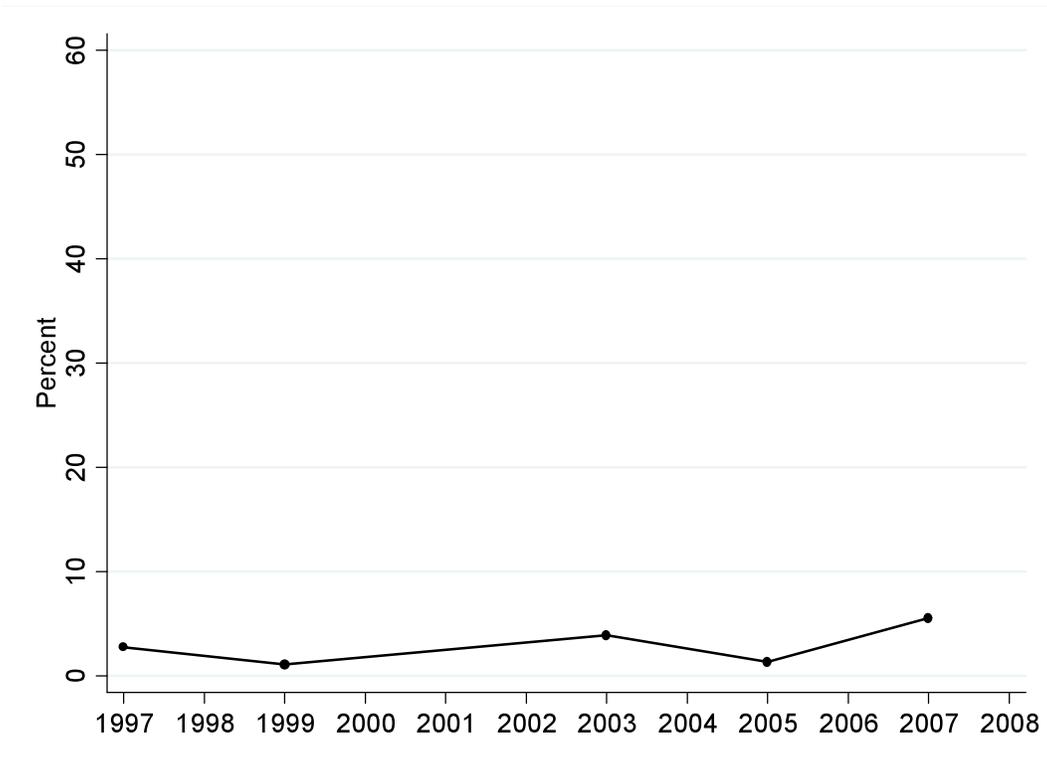
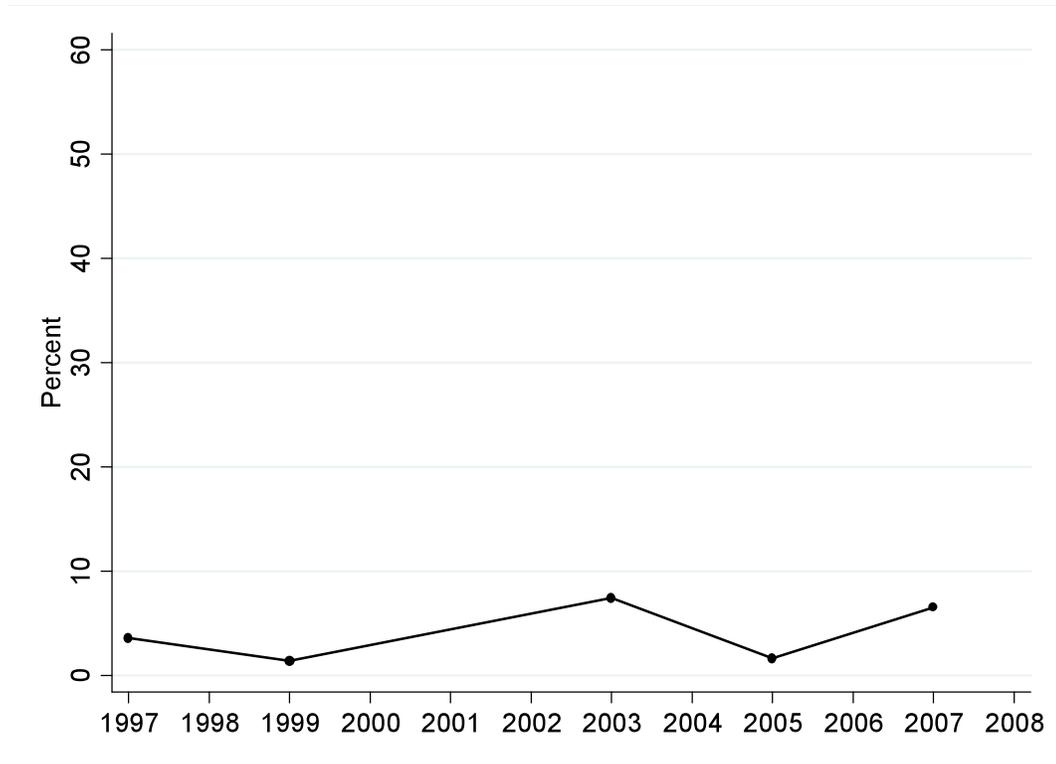


Figure D.10: Ever Used Nonprescribed Steroids (Grades 9–12), YRBS Survey



Appendix E. Interviewees

During the course of our work, we interviewed representatives from the following organizations:

Anchor Mental Health
Beacon Health Strategies LLC
Carnavale Associates LLC
Children's National Medical Center
Community Connections, Inc.
Criminal Justice Coordinating Council
DC Action for Children
DC Addiction Prevention and Recovery Administration
DC Behavioral Health Association
DC Chartered Health Plan, Inc.
DC Child and Family Services Agency
DC Department of Corrections
DC Department of Health
DC Department of Health Care Finance
DC Department of Mental Health
DC Department of Youth Rehabilitation Services
DC Pretrial Services Agency
DC Primary Care Association
George Washington University, Department of Prevention and Community Health
George Washington University, Midge Smith Center for Evaluation Effectiveness
Green Door
Health Right, Inc.
Health Policy Institute, Georgetown University
Howard University
Health Services for Children with Special Needs (HSCSN)
National Association of State Alcohol and Drug Abuse Directors
Psychiatric Institute of Washington
So Others Might Eat (SOME)
St. Elizabeth's Hospital
The Community Partnership
Unison Health Plan
Unity Health Care
Urban Institute
Whitman Walker Clinic