



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

Larry Hogan, Governor – Boyd Rutherford, Lt. Governor – Dennis R. Schrader, Secretary

February 7, 2017

The Honorable Edward J. Kasemeyer
Chair
Senate Budget & Taxation Committee
3 West Miller Senate Office Bldg.
Annapolis, MD 21401-1991

The Honorable Maggie McIntosh
Chair
House Appropriations Committee
121 House Office Bldg.
Annapolis, MD 21401-1991

Re: 2016 Joint Chairmen's Report (p. 78) – Report on Impact of Substance Use Disorder Services on the HealthChoice Program

Dear Chairmen Kasemeyer and McIntosh:

In keeping with the requirements of the 2016 Joint Chairmen's Report (p. 78), enclosed is the Department of Health and Mental Hygiene's report on the impact of the carve-out of Medicaid-eligible substance use disorder (SUD) services on the HealthChoice program. This report provides an assessment after the first full year detailing (1) the impact of the carve-out on access, quality, and efficiency of care in the HealthChoice Program and in the public behavioral health system; (2) if the carve-out has resulted in specific issues in any particular jurisdiction or in any level of care; (3) the specific impact on enrollees who require treatment for chronic conditions and SUDs and/or mental health (MH) disorders; and (4) an evaluation of the duties of the State's administrative services organization and the costs associated with the carve-out. Data in this report are presented for three calendar years (CYs)—2013, 2014, and 2015. Findings should be considered preliminary and may be subject to revision in future reports.

Thank you for your consideration of this information. If you have questions or need more information on the subjects included in this report, please contact Webster Ye, Director of Governmental Affairs at (410) 767-6480.

Sincerely,

Dennis R. Schrader
Secretary

Enclosure

cc: Shannon McMahon Rosemary Murphey
Tricia Roddy Alyssa Brown
Susan Tucker Webster Ye

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2016 Joint Chairmen's Report
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Submitted by the Department of Health and Mental Hygiene
December 2016

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Executive Summary

Pursuant to the 2016 Joint Chairman's Report (p. 78), the Maryland Department of Health and Mental Hygiene (the Department) Medicaid agency respectfully submits this report addressing the carve-out of Medicaid-eligible substance use disorder (SUD) services from the HealthChoice program.

Diagnosis with a serious mental health (MH) condition, a SUD, or both is associated with a higher risk of mortality, and the life expectancy of individuals with a behavioral health diagnosis may be reduced as much as 10 to 20 years as compared with their contemporaries.¹ Exacerbating the risk, many individuals with a MH diagnosis, a SUD, or both, also have significant chronic health conditions and often have worse health outcomes. Individuals with a behavioral health diagnosis are also a significant cost driver for Medicaid spending. The June 2015 Medicaid and CHIP Payment and Access Commission's Report to Congress noted that approximately one in five Medicaid participants lived with a diagnosed MH condition or SUD. In Maryland, approximately 15 percent of HealthChoice participants have been diagnosed with a behavioral health condition.

Following a multi-year stakeholder process to streamline the existing disparate systems of care for individuals with co-occurring serious mental illness and substance use issues, the Department elected to carve-out SUD service from its HealthChoice benefits package. Effective July 1, 2014, the Mental Hygiene Administration (MHA) and Alcohol and Drug Abuse Administration merged to become the Behavioral Health Administration (BHA). An administrative services organization (ASO) was selected in September 2014 to coordinate care for both Medicaid participants and the uninsured. Since January 1, 2015, all specialty MH and SUD services for Medicaid recipients have been administered by the ASO. Efforts to establish a braided funding source for Medicaid-covered substance use services for the uninsured population, including outpatient substance use services and residential substance use treatment, through the migration of funding from local jurisdictions to the ASO are still in their early stages. The implementation of performance-based standards for the ASO remains a challenge.

Preliminary findings suggest that the carve-out of SUD services and integration of benefits under the ASO have not yet significantly impacted the utilization of high-cost services. The data analyzed in this report includes one year of data for carved-out SUD services, and the preceding two years of SUD data when it was carved into managed care. Across all study years, inpatient and emergency department (ED) utilization and avoidable hospital readmissions remained consistent for individuals with a behavioral health diagnosis. Confounding factors across the three study years (2013-2015), including the expansion of Medicaid under the Affordable Care Act (ACA) and resulting significant enrollment growth in 2014 combined with additional eligibility fluctuations in 2015, may have impacted some results. Additionally, 2015 data has not yet been finalized. While it is possible that data from subsequent years will yield stronger results, in the absence of a downward trend, it is clear that additional opportunities to improve coordination of behavioral health and somatic services remain.

¹ Chesney, Edward, et al.. Risks of All-Cause and Suicide Mortality in Mental Disorders: A Meta-Review. World Psychiatry, June 2014. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4102288/>.

Improving integration of behavioral health and physical health services is a critical priority for the Centers for Medicare & Medicaid (CMS). CMS has taken particular interest in Maryland's integration efforts and recently issued new guidance regarding states' ability to cover services delivered through Institutions for Mental Diseases (IMDs).² As part of the Department's recent § 1115 waiver renewal, CMS is requiring the Department to examine its integration strategy and to commit to an improved approach by January 1, 2018, with the goal of implementing by January 1, 2019. Additionally, recent guidance issued by CMS in tandem with the new managed care regulations clarify the discretion states can exercise with respect to the provision of IMD services and opens the door for Maryland to adopt a different approach. Specifically, CMS clarified that when behavioral health services are offered through managed care, states are allowed to use monthly MCO capitation rates to cover short-term IMD stays for specialty mental health or SUD in lieu of providing such services in a costlier inpatient hospital setting. States, such as Maryland, that provide behavioral health services on a fee-for-service basis have the option to seek a § 1115 waiver to cover IMD services for participants with SUDs, but are precluded by current federal policy from covering IMD services for specialty mental health services outside of risk-based managed care arrangements. In an effort to expand access to Medicaid-funded SUD treatment services, the Department pursued this option in its most recent § 1115 waiver renewal despite the restriction to only SUD. Although both approaches have limitations, the relative latitude provided to states when services are provided through managed care may warrant further consideration.

Given these considerations the Department recommends the following:

1. Implementation of the special terms and conditions in the renewal of the HealthChoice § 1115 waiver and in accordance with these federal requirements, examine the integration of behavioral and physical health services in the State with the goal of implementing new recommendations no later than January 1, 2019;
2. Continuation of efforts to improve existing efforts and explore new opportunities to effectively coordinate care between behavioral health and physical health providers, including the existing chronic health home model; and
3. Consideration of performance-based standards for the ASO based exclusively on data available to the ASO and possible incorporation of such standards into the ASO's agreement with the Department.

² Under the IMD exclusion, CMS prohibits states from receiving federal matching dollars for services provided by IMDs for individuals between 21 and 64 years old absent other authority.

I. Introduction and Methodology

Pursuant to the 2016 Joint Chairman’s Report (p. 78), the Maryland Department of Health and Mental Hygiene (the Department) Medicaid agency respectfully submits this report addressing the carve-out of Medicaid-eligible substance use disorder (SUD) services from the HealthChoice Program. Specifically, the JCR requested an assessment after the first full year detailing (1) the impact of the carve-out on access, quality, and efficiency of care in the HealthChoice Program and in the public behavioral health system; (2) if the carve-out has resulted in specific issues in any particular jurisdiction or in any level of care; (3) the specific impact on enrollees who require treatment for chronic conditions and SUDs and/or mental health disorders (MHD); and (4) an evaluation of the duties of the State’s administrative services organization and the costs associated with the carve-out.

Data in this report are presented for three calendar years (CYs)—2013, 2014, and 2015. Findings should be considered preliminary and may be subject to revision in future reports. Changes underway across the study period impacted enrollment significantly, making it challenging to discern the influence of the carve-out compared to other events. In 2013, full Medicaid coverage for adults was limited to parents and caretaker relatives up to 116 percent of the federal poverty level (FPL). Childless adults up to 116 percent of the FPL were eligible for coverage through the Primary Adult Care (PAC) Program. PAC offered a limited benefits package, including outpatient specialty mental health and SUD services. In 2014, Maryland elected to expand coverage under the Affordable Care Act (ACA) to childless adults less than 65 years of age with incomes up to 138 percent of the FPL. In addition, the ACA raised the parent income limits to 138 percent FPL. As a result, enrollment increased significantly. Nearly 96,000 former PAC enrollees gained full Medicaid benefits effective January 1, 2014, and by December 2014 more than 240,000 participants had enrolled in Medicaid through the expansion. The addition of the expansion population contributed to an increase in behavioral health diagnoses from 2013 to 2015, and pent-up demand for services may have impacted some utilization measures. Enrollment fluctuations continued in 2015. Additionally, this analysis was performed using data available through October 31, 2016; therefore, CY 2015 data are incomplete.³ MMIS2 data are not considered complete until 12 months have passed for submission of fee-for-service (FFS) claims and six months for submission of managed care organization (MCO) encounters.

II. Provision of Behavioral Health Services in Maryland

Overview

HealthChoice—Maryland’s Statewide mandatory Medicaid managed care program—was implemented in 1997 under authority of Section 1115 of the Social Security Act. As of September 2016, 1,308,769 Marylanders are enrolled in Medicaid. Nearly 85 percent of the State’s Medicaid population is enrolled in the HealthChoice Program. Participants in the HealthChoice Program include children enrolled in the Maryland Children’s Health Program (MCHP), Maryland’s Children’s

³ Data for CYs 2013 and 2014 may also be impacted by differences in the approaches adopted by the MCOs with respect to use of provider types and coding structures.

Health Insurance Program (CHIP). HealthChoice participants choose one of the participating managed care organizations (MCOs) and a primary care provider (PCP) from their MCO's network to oversee their medical care.

Though the federal government requires every state Medicaid program to cover a specific set of services, states have some flexibility to design their own benefit packages. Generally, services must be equal in amount, duration, and scope for all participants based on medical necessity criteria—in addition to being available across the state. Maryland has incorporated a wide array of MH and SUD services into its Medicaid programs.

The following mental health services are covered under the Maryland Medicaid Program:

- Inpatient care in psychiatric units of acute general hospitals for all ages;
- Inpatient psychiatric services for individuals under 21 years old in free-standing Institutions for Mental Diseases (IMDs);
- Mental health assessment;
- Individual therapy;
- Group therapy;
- Mental health targeted case management;
- Family psychotherapy and psychoeducation;
- Psychiatric rehabilitation;
- Psychological testing;
- Assertive community treatment;
- Mobile treatment;
- Intensive outpatient program services;
- Partial hospitalization;
- Prescription medications;
- Applied Behavior Analysis (ABA) for participants under 21⁴; and
- Laboratory services.

The following substance use services are covered under the Maryland Medicaid Program:

- Inpatient detoxification in acute general hospitals for individuals of all ages;
- Inpatient detoxification and SUD treatment services for individuals under 21 years old in free-standing IMDs - which in Maryland are licensed as Intermediate Care Facilities for Addictions;
- Alcohol and/or drug assessment;
- Individual therapy;

⁴ Services covered effective January 1, 2017. Applied Behavior Analysis (ABA) is an evidence-based treatment for individuals with Autism Spectrum Disorder (ASD) that includes many different techniques to increase useful or desired behaviors such as communication and social skills, and to reduce behaviors that may interfere with learning or behaviors that may be harmful. For additional information, see <http://maryland.beaconhealthoptions.com/autism/autism-home.html>.

- Group therapy;
- Intensive outpatient program services;
- Partial hospitalization;
- Ambulatory detoxification;
- Opioid maintenance therapy for individuals 18 and over;
- Prescription medications; and
- Laboratory services.

Non-Medicaid reimbursable behavioral health services are also available to qualifying individuals. Among other things, these services include supported employment, respite care, crisis services, peer support, recovery services, and residential rehabilitation programs.

In 2010, Maryland began a Behavioral Health Integration stakeholder process to streamline the existing disparate systems of care for individuals with co-occurring serious mental illness and substance use issues. From the time the HealthChoice Program began, mental health services were carved out of the benefit package and administered by an administrative services organization (ASO), while services for individuals with SUDs were carved in. The Mental Hygiene Administration (MHA), the ASO, and local entities coordinated mental health treatment services for uninsured individuals, while SUD services were provided via grant-funded programs administered by the local jurisdictions. Phase 1 of the stakeholder process involved collaboration among the Department, a consultant, and stakeholders to assess the strengths and weaknesses of Maryland's system. In early 2012, phase 2 of the process involved development of a broad financing model to better integrate care. In 2013, the Department announced the decision to establish a carve-out for substance use and mental health services.

The decision to pursue a carve-out for substance use and mental health services resulted in significant changes across the Department. Effective July 1, 2014, the MHA and Alcohol and Drug Abuse Administration (ADAA) merged to become the Behavioral Health Administration (BHA). On September 3, 2014, a competitive procurement process for a new performance-based contract for the carve-out for mental health and substance use services selected the previous ASO, Beacon Health Options (formerly ValueOptions). Effective January 1, 2015, all specialty MH and SUD services for Medicaid participants are now administered by Beacon Health Options. The ASO also manages authorization and payment of Medicaid and non-Medicaid-covered MH services for the uninsured population, including psychiatric rehabilitation services, counseling, and mental health intensive outpatient services. This facilitates reimbursement for providers, and continuity of services, if individuals churn off of Medicaid. Many of the perceived benefits of an ASO model are in the later stages of development, including efforts to establish a braided funding source for Medicaid-covered SUD services for the uninsured population, through the migration of funding from local jurisdictions. It is expected that this transition to the fee-for-service model for SUD residential services to the ASO will be finalized in July 2017. The role of the ASO will be discussed in greater detail later in this report.

Other Medicaid Initiatives Impacting Access, Quality, and Efficiency of Care

The Department is engaged in a variety of initiatives designed to connect Medicaid participants to necessary and appropriate health care. Two efforts underway at the Department focus specifically on participants with behavioral health needs—encouraging the adoption of Screening, Brief Intervention, and Referral to Treatment (SBIRT) Services by primary care providers and the Chronic Health Homes Program. The Department is also exploring options to cover SUD residential treatment through the Medicaid Program under a § 1115 Waiver.

Screening, Brief Intervention, and Referral to Treatment Services

SBIRT is a public health method for delivering early population screening, intervention, brief treatment, and referral service for those at risk of developing SUDs. Providers using SBIRT ask patients about substance use during a routine exam, advise their patients, and refer them to SUD treatment if appropriate.

Efforts to increase the adoption of SBIRT for adults and adolescents on a Statewide basis by leveraging several grant funding streams are ongoing.⁵ The goals of the Maryland SBIRT Initiative include improving the health status of Marylanders through the integration of behavioral health and medical health care services, increasing identification of and intervention with individuals with risky substance use, demonstrating reduced substance use among individuals who receive SBIRT services, reducing overdose deaths and promoting health equality through the provision of universal behavioral health prevention and early intervention approaches, and demonstrating increased capacity to treat substance use disorders in underserved regions of Maryland. Most recently, the Substance Abuse and Mental Health Services Administration (SAMHSA) awarded a \$9.8 million, five year grant to Maryland in 2014 to implement SBIRT services. The project provides training to health care providers, SBIRT screening tools, and assistance in adapting electronic health records to incorporate SBIRT screening tools and service documents. Over the course of the five year grant, SBIRT will be implemented in approximately 34 community health centers and seven hospitals in 11 Maryland jurisdictions and is projected to reach more than 300,000 individuals. The selected jurisdictions have among the highest rates of intoxication deaths, drug-induced deaths, drug arrests, drug- and alcohol-related car crashes, and numbers of persons treated for drug and alcohol disorders.

In tandem with these Statewide efforts, the Medicaid Program introduced new guidance on the provision of SBIRT to encourage Medicaid providers to incorporate screening into their practices.⁶ The guidance, issued in July 2016, included clarifications on the provider types eligible to bill for services, billable services, and new coding and reimbursement guidelines. The Department reimburses a billing provider for one screening and up to four interventions per recipient aged 12 years and older annually.

⁵ For additional information, see <http://www.marylandsbirt.org/about/initiatives/>.

⁶ Beacon Health Options Transmittal No. 6. Maryland Department of Health and Mental Hygiene, June 8, 2016. <http://maryland.beaconhealthoptions.com/provider/alerts/2016/PT-44-16.pdf>.

Preliminary analyses of Medicaid SBIRT data have been positive; 3,493 Medicaid enrollees received SBIRT services from September 2015 through August 2016.⁷ Table 1 shows that among SBIRT recipients, 13 percent went on to receive specialty SUD treatment, and 18 percent went on to receive behavioral health services. Note that SBIRT usually will not identify pathology that warrants referral in all cases because SUDs (excluding tobacco addiction) affect just 12-14 percent of the Medicaid population.⁸

Table 1. Behavioral Health (BH) Service Utilization after First SBIRT for Those with ≥1 Month Medicaid Enrollment (N=3,480)

Group	N (%)
Enrollees with carved-out SUD service	446 (13%)
Enrollees with any carved-out BH service	621 (18%)

Table 2 narrows the sample to those with *no history of Medicaid SUD treatment* in the period before SBIRT. This subsample showed lower rates of referral from SBIRT compared to the full sample represented in Table 1.

Table 2. Among Those with No SUD Services before First SBIRT (N=2950)

Group	N (%)
Enrollees with carved-out SUD service	178 (6%)
Enrollees with any carved-out BH service	300 (10%)

Finally, Table 3 narrows the sample again by reviewing data only on those with *no history of Medicaid behavioral health treatment* in the period before SBIRT in order to identify those who are new to the Medicaid behavioral health system. This subsample showed the lowest rates of referral from SBIRT compared to all the other tables.

Table 3. Among Those with No BH Claims before First SBIRT (N=2746)

Group	N (%)
Enrollees with carved-out SUD service	137 (5%)
Enrollees with any carved-out BH service	161 (6%)

As awareness regarding the provision of SBIRT continues to grow at a provider level, the Department anticipates utilization will increase and more individuals may be referred to treatment. As the State has integrated at an administrative level through the creation of BHA and the carve-out of SUD services under the same ASO as MH services, integration at the provider-level remains a

⁷ Please note that the analysis was performed using data available through August 2016. MMIS2 data are not considered complete until 12 months have passed for submission of fee-for-service (FFS) claims and six months for submission of managed care organization (MCO) encounters. Therefore, utilization data should be considered preliminary and can be revised in future reports.

⁸ Adelman, P.K. (2003). Mental and substance use disorders among Medicaid recipients: Prevalence estimates from two national surveys. *Administrative Policy in Mental Health and Mental Health Research Services*, 31(2), 111-129.

challenge. As a result, the Department is undertaking numerous efforts to improve the quality of, and access to, integrated SUD and MH services. Moreover, with behavioral health services delivered in FFS environment, the Department is focused on improving the integration of MH and SUD services, with services administered by the State's MCOs.

Chronic Health Home Program

The ACA created the option for state Medicaid programs to establish Health Homes.⁹ In response, the Department began the Chronic Health Home Initiative in October 2013 as a five-year demonstration. The program is focused on Medicaid participants with a serious and persistent mental illness (SPMI), an opioid SUD and risk of additional chronic conditions due to tobacco, alcohol, or other non-opioid substance use, and children with serious emotional disturbance (SED). The Chronic Health Home Program is discussed in greater detail later in this report.

Access to Residential Services (IMD)

The IMD exclusion limits the number of beds a SUD or a psychiatric treatment facility may operate in order to receive reimbursement from Medicaid to less than 16. Furthermore, it excludes states from receiving federal matching dollars for services provided by IMDs for individuals between 21 and 64 years old. An IMD is defined as a facility with more than 16 beds that is primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases and chemical dependency disorders. Receiving federal financial participation for services provided to individuals residing in IMDs would allow providers to admit more patients into residential treatment for SUDs.

The effects of the IMD exclusion are significant. The IMD exclusion incentivizes hospitalization in a general acute care hospital over care in a SUD residential treatment program. These hospitalizations typically only treat the medical effects of individuals' illnesses while neglecting the illnesses themselves and the long-term consequences of SUDs. The National Council on Alcoholism & Drug Dependence-Maryland noted that the IMD exclusion results in individuals seeking treatment in lower levels of care than what is clinically recommended.

Although the IMD exclusion is one of the few instances where Medicaid is not permitted to provide payment for medically necessary services, this was not always the case. The Centers for Medicare & Medicaid Services (CMS) had approved IMD exclusion waivers in the past. For instance, Maryland's first IMD exclusion waiver was granted in 1997 and allowed adults between the ages of 21 and 64 with acute episodes of mental illness to receive Medicaid-covered treatment in IMDs, rather than general acute care hospitals. However, beginning in fiscal year (FY) 2006, CMS phased out the use of IMDs, resulting in Maryland receiving 50 percent of the expected federal financial participation for FY 2007 and zero percent for FY 2008.

Maryland was also one of the states selected for the Medicaid Emergency Psychiatric Demonstration, a pilot program established under Section 2707 of the ACA that made Medicaid funds available to non-public psychiatric hospitals for emergency inpatient psychiatric care provided

⁹ ACA § 2703(a) (42 USC § 1396w-4(a)).

to Medicaid enrollees aged 21 to 64 for an initial three-year period. The demonstration tested the extent to which reimbursing these hospitals for inpatient services needed to stabilize a psychiatric emergency medical condition, which is generally prohibited under Medicaid statute, improved access to and quality of care for beneficiaries and reduced overall Medicaid costs and utilization.

In December 2015, Congress passed a bill sponsored by Senators Ben Cardin (D-Md.), Pat Toomey (R-Pa.) and Susan Collins (R-Maine), the Improving Access to Emergency Psychiatric Care Act (S.599/H.R. 3681), which extended the Medicaid Emergency Psychiatric Services Demonstration for an additional three years after funds ran out. However, CMS announced its intent to discontinue the program in August on the basis that it could not be sure that it is budget neutral. Maryland's experience with the demonstration suggests that savings could be realized. Medicaid patients treated under the demonstration incurred costs of \$864 per day compared to \$2,965 for emergency psychiatric treatment. Overall, the State projected that keeping the program alive would result in a savings of \$8 million a year. In September, Senator Cardin along with members of Congress representing other states that participated in the demonstration sent a letter to CMS asking that the agency reconsider its decision and expressing concern that all relevant data was not considered.¹⁰

Recent guidance issued by CMS in tandem with the new managed care regulations clarify the discretion states can exercise with respect to the provision of IMD services. CMS clarified that when behavioral health services are offered through managed care, states may permit use of monthly MCO capitation rates to cover short-term IMD stays. Specifically, states may permit (but not require) managed care organizations (MCOs) to cover up to 15 days per month in an IMD in lieu of providing such services in a costlier inpatient hospital setting. States, such as Maryland, that provide behavioral health services on a FFS basis have the option to seek a § 1115 waiver to cover IMD services for participants with SUDs, but are precluded from covering IMD services for specialty mental health services. Although both options have constraints, the relative latitude provided to states when services are provided through managed care may warrant further consideration.

Currently, Medicaid, through the ASO, reimburses providers of SUD treatment for the following ASAM levels of care: Level 1 outpatient, Level 2 intensive outpatient and partial hospitalization, and Level 4 detoxification for all age groups in acute general hospital detox units and psychiatric units, and Level 3, residential detox and 3.7 treatment for individuals under the age of 21.¹¹ On July 27, 2015, Maryland submitted an amendment to its HealthChoice § 1115 demonstration waiver to allow for coverage of residential treatment for both SUD and mental health diagnoses for recipients of adults. CMS denied the component of the amendment seeking coverage for mental health

¹⁰ <http://cardin.senate.gov/download/cms-letter-on-mepd>.

¹¹ American Society of Addiction Medicine (ASAM) Criteria means an instrument designed to indicate placement guidelines for admission, continued stay, and discharge of individuals with a substance-related disorder. For additional information, see <http://www.asam.org/quality-practice/guidelines-and-consensus-documents/the-asam-criteria>.

diagnoses. The State modified its proposal to only focus on SUD coverage for these and other services, in accordance with the State Medicaid Director letter #15-003.¹²

The Department recently renewed its HealthChoice § 1115 demonstration waiver.¹³ As part of its renewal application submitted on June 30, 2016, the Department sought an amendment that would allow for Medicaid payments for SUD services in IMDs. CMS approved this amendment as part of the waiver renewal.¹⁴ This will (1) target private IMDs treating individuals with SUD treatment needs, and (2) allow Medicaid to pay for SUD services for adults aged 21 to 64 in IMDs, rather than in general acute care hospitals.

More specifically, the Department applied for expenditure authority for otherwise-covered services provided to Medicaid-eligible individuals aged 21 to 64 who are enrolled in a Medicaid MCO and reside in a non-public IMD for American Society of Addiction Medicine (ASAM) Residential levels 3.1, 3.3, 3.5, 3.7, and 3.7WM (licensed at 3.7D in Maryland). Effective July 1, 2017, the Department proposes to provide reimbursement for up to two nonconsecutive 30-day stays annually for ASAM levels 3.7WM, 3.7, 3.5, and 3.3. The Department intends to phase in coverage of ASAM level 3.1 beginning on January 1, 2019.

III. Population Characteristics

This section presents demographic measures for the HealthChoice participants served by the ASO based on diagnosis with a SUD¹⁵, an MHD¹⁶, or co-occurring diagnosis with both a SUD and a MHD. The three categories of SUD, MHD, and co-occurring are mutually exclusive categories presented throughout this report. Many of the increases in enrollment can be attributed to the Medicaid expansion under the ACA. The ACA expanded Medicaid to childless adults less than 65 years of age with incomes up to 138 percent of the FPL. In addition, the ACA raised the parent income limits to 138 percent FPL. By December 2014 more than 240,000 participants had enrolled in Medicaid through the expansion coverage group. This expansion contributed to the increase in behavioral diagnoses from 2013 to 2015.

Please note that the analyses performed throughout this report use data available through October 31, 2016; therefore, there is insufficient run out for claims submission for the CY 2015 measures. MMIS2 data are not considered complete until 12 months have passed for submission of fee-for-service (FFS) claims. Therefore, utilization data for CY 2015 should be considered preliminary at this time and can be revised in future reports.

¹² <https://www.medicaid.gov/federal-policy-guidance/downloads/SMD15003.pdf>.

¹³ <http://dhmh.maryland.gov/newsroom/Pages/Federal-government-signs-off-on-Maryland-Medicaid%E2%80%99s-waiver-renewal.aspx> . For additional information, see <https://mmcp.dhmh.maryland.gov/Pages/1115-HealthChoice-Waiver-Renewal.aspx>.

¹⁴ <http://dhmh.maryland.gov/newsroom/Pages/Federal-government-signs-off-on-Maryland-Medicaid%E2%80%99s-waiver-renewal.aspx>.

¹⁵ Individuals were identified using the behavioral health codes described in COMAR 10.09.70.02. Codes were based on primary diagnosis.

¹⁶ Individuals were identified using the behavioral health codes described in COMAR 10.09.70.02. Codes were based on primary diagnosis.

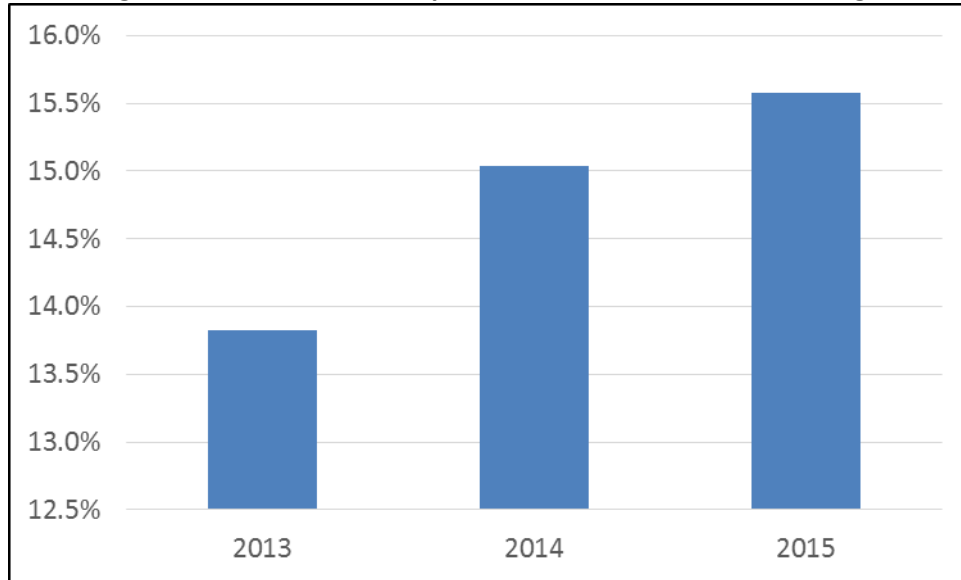
Table 4 shows the number of individuals with a behavioral health diagnosis in HealthChoice. A disproportionate share of the population with behavioral health diagnoses (58 percent) live in the Baltimore metropolitan area. Overall, there were 204,011 individuals with a behavioral health diagnosis in HealthChoice in calendar year (CY) 2015, or approximately 15.6 percent of the HealthChoice population (Figure 1).

Table 4. Individuals in HealthChoice with a Behavioral Health Diagnosis by Region, CY15

	MHD Only		SUD Only		Both MHD and SUD		Neither MHD nor SUD	
	#	%	#	%	#	%	#	%
Baltimore City	37,096	25.8%	10,116	29.9%	9,498	36.2%	190,765	17.3%
Baltimore Suburban	43,324	30.1%	10,405	30.7%	7,458	28.4%	311,194	28.2%
Eastern Shore	16,145	11.2%	4,323	12.8%	2,948	11.2%	97,348	8.8%
Southern Maryland	6,595	4.6%	1,786	5.3%	1,276	4.9%	56,341	5.1%
Washington Suburban	25,847	18.0%	3,843	11.3%	2,119	8.1%	364,881	33.0%
Western Maryland	14,661	10.2%	3,372	10.0%	2,907	11.1%	83,393	7.5%
Out of State	211	0.1%	41	0.1%	40	0.2%	1,395	0.1%
Total	143,879	100.0%	33,886	100.0%	26,246	100.0%	1,105,317	100.0%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Figure 1. Percentage of HealthChoice Participants with a Behavioral Health Diagnosis, CY13-CY15



***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

The number of HealthChoice participants with a behavioral health diagnosis increased from 133,233 participants (14 percent) in 2013 to 204,011 participants (15.6 percent) in 2015. Much of this increase can be attributed to the Medicaid expansion under the ACA. This expansion contributed to the increase in behavioral diagnoses from 2013 to 2014 (133,233 to 188,580 participants). Specifically, adults that had been in the PAC program made up the largest percentage of ACA Medicaid expansion adults with a behavioral health diagnosis. From 2014 to 2015, while the number of participants with a behavioral diagnosis increased, the percentage of the total HealthChoice population remained consistent (15 percent for both years).

Table 5 displays the demographic characteristics of HealthChoice MCO participants with a MHD during CY 2013 through CY 2015. In CY 2013, there were 45,911 black participants (45.5 percent) with a MHD and 36,540 white participants (36.2 percent) with a MHD. In CY 2015, there were 67,778 black participants (47.1 percent) with a MHD and 57,021 white participants (39.6 percent). The increase in the percentage of black participants from 45.5 percent in CY 2013 to 47.1 percent in CY 2015 is a likely result of the ACA Medicaid expansion.

For all three years (CY 2013-CY 2015), there were more female HealthChoice participants with a MHD than the male participants. The majority of HealthChoice participants with a MHD were located in Baltimore suburban or Baltimore City for all three years (CY 2013-CY 2015). The largest number of HealthChoice participants with a MHD were aged 0 to 18 years for all three years, followed by participants aged 19 to 39 years. Contributing to the high volume of children from birth

to 18 years with a MH diagnosis, just over a third have at least one claim with a primary diagnosis of attention deficit/hyperactivity disorder (ADHD).

**Table 5. Demographic Characteristics of HealthChoice MCO Participants with a MHD,
CY 2013-CY 2015**

	CY 2013		CY 2014		CY 2015	
<i>Race</i>	# of Participants	% of Participants	# of Participants	% of Participants	# of Participants	% of Participants
Asian	1,024	1.0%	1,603	1.2%	1,834	1.3%
Black	45,911	45.5%	62,057	47.7%	67,778	47.1%
White	36,540	36.2%	52,545	40.3%	57,021	39.6%
Hispanic	1,484	1.5%	6,641	5.1%	7,598	5.3%
Other	15,853	15.7%	7,388	5.7%	9,648	6.7%
Total	100,812	100.0%	130,234	100.0%	143,879	100.0%
Sex						
Female	56,228	55.8%	72,092	55.4%	79,850	55.5%
Male	44,584	44.2%	58,142	44.6%	64,029	44.5%
Total	100,812	100.0%	130,234	100.0%	143,879	100.0%
Region						
Baltimore City	27,331	27.1%	33,766	25.9%	37,096	25.8%
Baltimore Suburban	29,630	29.4%	38,993	29.9%	43,324	30.1%
Eastern Shore	11,943	11.8%	14,968	11.5%	16,145	11.2%
Southern Maryland	4,470	4.4%	5,997	4.6%	6,595	4.6%
Washington Suburban	16,562	16.4%	22,602	17.4%	25,847	18.0%
Western Maryland	10,604	10.5%	13,642	10.5%	14,661	10.2%
Out of State	272	0.3%	266	0.2%	211	0.1%
Total	100,812	100.0%	130,234	100.0%	143,879	100.0%
Age Group						
0-18	55,646	55.2%	59,231	45.5%	65,237	45.3%
19-39	27,328	27.1%	39,621	30.4%	44,330	30.8%
40-64	17,650	17.5%	31,049	23.8%	33,915	23.6%
65+	188	0.2%	333	0.3%	397	0.3%
Total	100,812	100.0%	130,234	100.0%	143,879	100.0%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 6 displays the demographic characteristics of HealthChoice MCO Participants with a SUD during CY 2013 through CY 2015. Throughout CY 2013 to CY 2015, the majority of HealthChoice participants with a SUD were black or white. In CY 2013, there were 8,104 blacks (41.3 percent) with a SUD and 7,676 whites (39.1 percent) with a SUD. In CY 2014, the number of black participants increased to 14,752 (42.8 percent) and the number of white participants increased to 16,817 (48.8 percent). In CY 2015, there was a slight decrease in black participants to 13,646 (40.3 percent), but there was an increase in white participants to 17,229 (50.8 percent).

In CY 2013, there were 10,826 female participants (55.2 percent) with a SUD compared to 8,799 males (44.8 percent). However, in CY 2014, there was an increase in the percentage of males with a SUD to 58.6 percent and a decrease in the percentage of females to 41.4 percent; this is due to the Medicaid expansion which allowed more males to enroll in Medicaid under the ACA childless adult category. In CY 2015, the percentage of males increased slightly to 59 percent and the percentage of females decreased to 40.9 percent. The majority of HealthChoice participants with a SUD resided in Baltimore City or Baltimore Suburban throughout CY 2013-CY 2015.

In CY 2013, 27 percent of HealthChoice participants with a SUD were 18 years or younger; however this decreased to 9.3 percent in CY 2014 and 7.2 percent in CY 2015. While the percentage of participants aged 18 years or younger decreased, the percentage of enrollees aged 19 to 39 years increased from 43.6 percent in CY 2013 to 50.7 percent in CY 2015. The percentage of enrollees aged 40-64 years increased from 29.2 percent in CY 2013 to 41.8 percent in CY 2015.

Table 6. Demographic Characteristics of HealthChoice MCO Participants with a SUD, CY 2013-CY 2015

<i>Race</i>	CY 2013		CY 2014		CY 2015	
	# of Participants	% of Participants	# of Participants	% of Participants	# of Participants	% of Participants
Asian	131	0.7%	253	0.7%	219	0.6%
Black	8,104	41.3%	14,752	42.8%	13,646	40.3%
White	7,676	39.1%	16,817	48.8%	17,229	50.8%
Hispanic	333	1.7%	982	2.9%	881	2.6%
Other	3,381	17.2%	1,631	4.7%	1,911	5.6%
Total	19,625	100.0%	34,435	100.0%	33,886	100.0%
Sex						
Female	10,826	55.2%	14,266	41.4%	13,855	40.9%
Male	8,799	44.8%	20,169	58.6%	20,031	59.1%
Total	19,625	100.0%	34,435	100.0%	33,886	100.0%
Region						
Baltimore City	5,322	27.1%	10,827	31.4%	10,116	29.9%
Baltimore Suburban	4,832	24.6%	10,054	29.2%	10,405	30.7%
Eastern Shore	2,204	11.2%	4,139	12.0%	4,323	12.8%
Southern Maryland	1,155	5.9%	1,918	5.6%	1,786	5.3%
Washington Suburban	4,329	22.1%	4,161	12.1%	3,843	11.3%
Western Maryland	1,737	8.9%	3,288	9.5%	3,372	10.0%
Out of State	46	0.2%	48	0.1%	41	0.1%
Total	19,625	100.0%	34,435	100.0%	33,886	100.0%
Age Group						
0-18	5,296	27.0%	3,192	9.3%	2,427	7.2%
19-39	8,553	43.6%	16,826	48.9%	17,165	50.7%
40-64	5,727	29.2%	14,338	41.6%	14,177	41.8%
65+	49	0.2%	79	0.2%	117	0.3%
Total	19,625	100.0%	34,435	100.0%	33,886	100.0%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 7 displays the demographic characteristics of HealthChoice MCO participants with both a MHD and a SUD during CY 2013 to CY 2015. In CY 2013, 12,796 participants had both a MHD and a SUD; this increased to 23,911 in CY 2014, and to 26,246 in CY 2015.

The majority of the participants were black or white throughout the measurement period. Whites made up the largest percentage of participants with a MHD and a SUD for all three years. In CY 2013, 59.4 percent of participants with a MHD and a SUD were females and 40.6 percent were males. In CY 2014, the percentage of females decreased to 49 percent and the percentage of males increased to 51 percent. In CY 2015, the percentage of females decreased to 48.2 percent and the percentage of males increased to 51.8 percent. The majority of the participants were located in Baltimore City or Baltimore Suburban throughout the measurement period.

The highest percentage of participants with both a MHD and a SUD for all three years were aged 19 to 39 years. In CY 2013, 41.5 percent of participants with a SUD and a MHD were 40 to 64 years old; this increased to 46.2 percent in CY 2014, and then decreased to 45.4 percent in CY 2015.

Table 7. Demographic Characteristics of HealthChoice MCO Participants with Both MHD and SUD, CY 2013-CY 2015

<i>Race</i>	CY 2013		CY 2014		CY 2015	
	# of Participants	% of Participants	# of Participants	% of Participants	# of Participants	% of Participants
Asian	52	0.4%	90	0.4%	111	0.4%
Black	4,997	39.1%	9,549	39.9%	10,289	39.2%
White	6,135	47.9%	13,084	54.7%	14,342	54.6%
Hispanic	82	0.6%	294	1.2%	338	1.3%
Other	1,530	12.0%	894	3.7%	1,166	4.4%
Total	12,796	100.0%	23,911	100.0%	26,246	100.0%
<i>Sex</i>						
Female	7,607	59.4%	11,726	49.0%	12,655	48.2%
Male	5,189	40.6%	12,185	51.0%	13,591	51.8%
Total	12,796	100.0%	23,911	100.0%	26,246	100.0%
<i>Region</i>						
Baltimore City	4,871	38.1%	9,078	38.0%	9,498	36.2%
Baltimore Suburban	3,482	27.2%	6,829	28.6%	7,458	28.4%
Eastern Shore	1,436	11.2%	2,428	10.2%	2,948	11.2%
Southern Maryland	613	4.8%	1,132	4.7%	1,276	4.9%
Washington Suburban	1,029	8.0%	1,862	7.8%	2,119	8.1%
Western Maryland	1,333	10.4%	2,532	10.6%	2,907	11.1%
Out of State	32	0.3%	50	0.2%	40	0.2%
Total	12,796	100.0%	23,911	100.0%	26,246	100.0%
<i>Age Group</i>						
0-18	1,755	13.7%	1,598	6.7%	1,547	5.9%
19-39	5,700	44.5%	11,229	47.0%	12,724	48.5%
40-64	5,315	41.5%	11,047	46.2%	11,919	45.4%
65+	26	0.2%	37	0.2%	56	0.2%
Total	12,796	100.0%	23,911	100.0%	26,246	100.0%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 8 displays the demographic characteristics of HealthChoice MCO participants who did not have a MHD or a SUD during CY 2013 through CY 2015. In CY 2013, 830,310 participants had neither a MHD nor a SUD; this increased to 1,065,602 in CY 2014 and 1,105,317 in CY 2015. The increase in CY 2014 is the result of the ACA Medicaid expansion in 2014.

Table 8. Demographic Characteristics of HealthChoice MCO Participants with Neither MHD nor SUD, CY 2013-CY 2015

<i>Race</i>	CY 2013		CY 2014		CY 2015	
	# of Participants	% of Participants	# of Participants	% of Participants	# of Participants	% of Participants
Asian	29,429	3.5%	49,443	4.6%	55,104	5.0%
Black	366,436	44.1%	497,783	46.7%	496,030	44.9%
White	214,048	25.8%	289,336	27.2%	295,256	26.7%
Hispanic	26,190	3.2%	120,412	11.3%	117,541	10.6%
Other	194,207	23.4%	108,628	10.2%	141,386	12.8%
Total	830,310	100.0%	1,065,602	100.0%	1,105,317	100.0%
<i>Sex</i>						
Female	474,258	57.1%	588,564	55.2%	606,914	54.9%
Male	356,052	42.9%	477,038	44.8%	498,403	45.1%
Total	830,310	100.0%	1,065,602	100.0%	1,105,317	100.0%
<i>Region</i>						
Baltimore City	152,648	18.4%	192,316	18.0%	190,765	17.3%
Baltimore Suburban	233,459	28.1%	299,095	28.1%	311,194	28.2%
Eastern Shore	75,656	9.1%	95,404	9.0%	97,348	8.8%
Southern Maryland	42,363	5.1%	54,433	5.1%	56,341	5.1%
Washington Suburban	259,320	31.2%	341,163	32.0%	364,881	33.0%
Western Maryland	64,962	7.8%	81,315	7.6%	83,393	7.5%
Out of State	1,902	0.2%	1,876	0.2%	1,395	0.1%
Total	830,310	100.0%	1,065,602	100.0%	1,105,317	100.0%
<i>Age Group</i>						
0-18	544,594	65.6%	576,094	54.1%	573,438	51.9%
19-39	202,750	24.4%	298,052	28.0%	317,802	28.8%
40-64	82,182	9.9%	188,661	17.7%	209,825	19.0%
65+	784	0.1%	2,795	0.3%	4,252	0.4%
Total	830,310	100.0%	1,065,602	100.0%	1,105,317	100.0%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

For CY 2013 through CY 2015, the majority of the participants were black. The second largest group of participants were white. Throughout the measurement period more than 50 percent of the participants were females. The majority of participants with neither a MHD nor a SUD were located in the Washington Suburban or Baltimore Suburban areas.

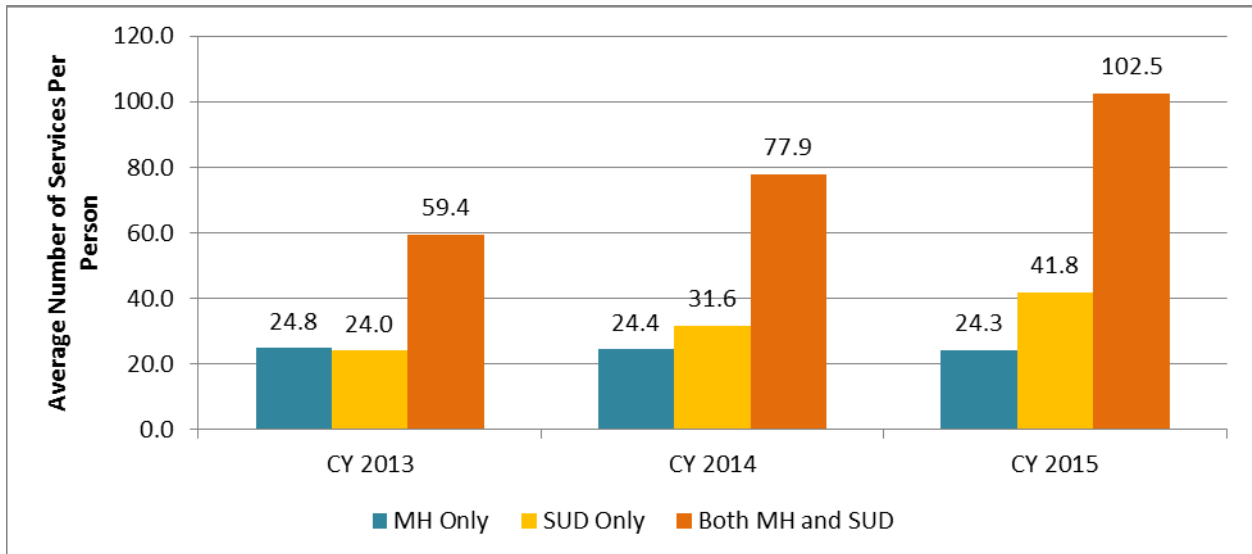
IV. Impact of the Carve-Out on Access, Quality, and Efficiency of Care Delivery

The following section discusses several measures designed to evaluate how the Behavioral Health Integration process has impacted access, quality, and efficiency of care for the Medicaid population. Measures are broken down to evaluate the results for enrollees with (1) a MHD only, (2) a SUD only, (3) co-occurring diagnosis with SUD and MHD, and (4) no diagnosis with a SUD or a MHD. Most measures compare utilization rates for the HealthChoice population against the Medicaid population overall. Please note that as with the data in the previous section, the analysis was performed using data available through October 31, 2016; therefore, there is insufficient run out for claims submission for the CY 2015 measures. Utilization data for CY 2015 should be considered preliminary at this time and can be revised in future reports.

Behavioral Health Services

Figure 2 presents the average number of behavioral health services per person for HealthChoice between CY 2013 and CY 2015. Please note that an individual may receive more than one service with the same provider on the same day. The data are presented for each diagnostic category (MHD only, SUD only, and co-occurring). The average number of services remained stable for the MHD population, but increased for the SUD and co-occurring populations.

Figure 2. Average Number of Behavioral Services per Person by Diagnostic Category, HealthChoice, CY 2013-2015



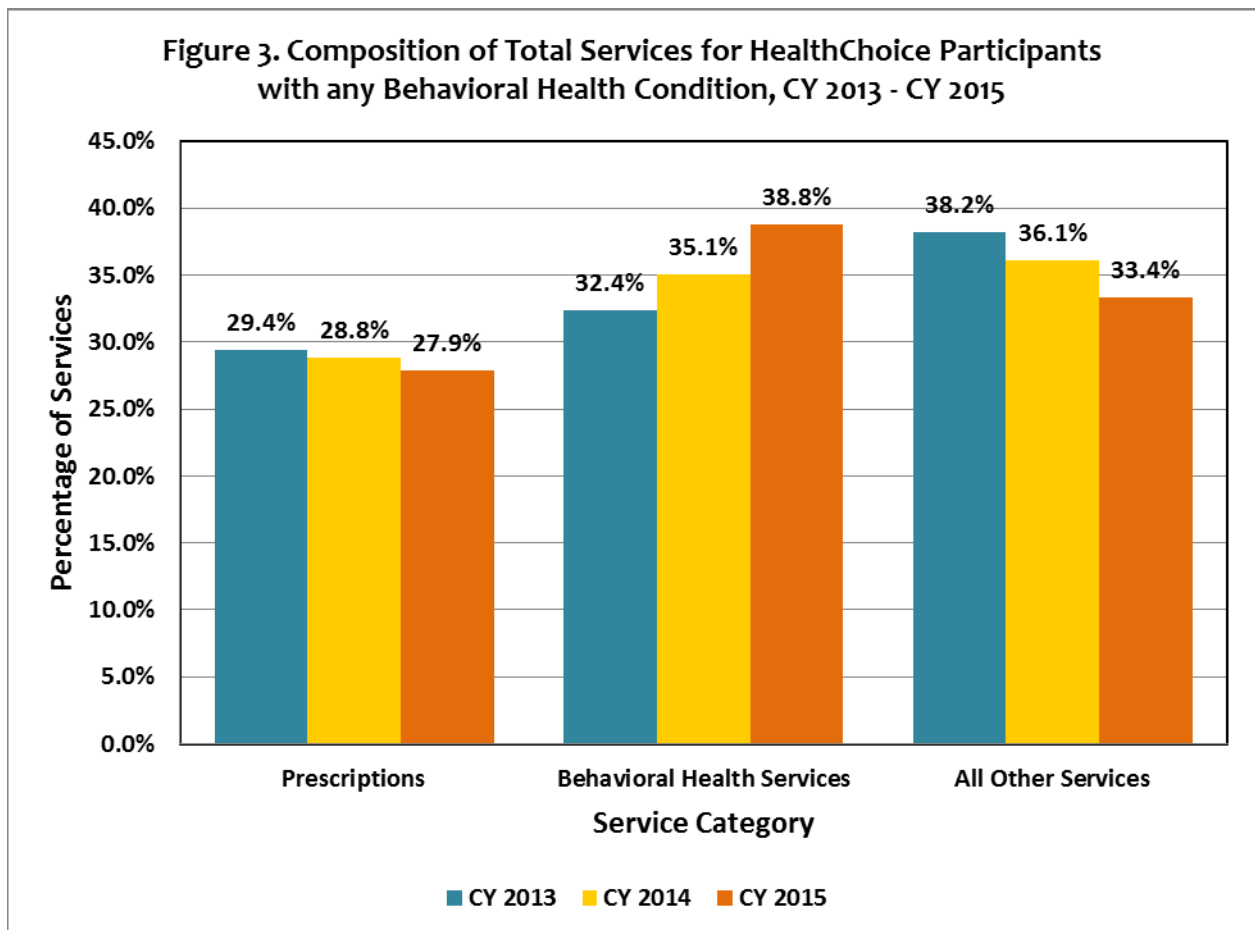
*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Composition of Health Services Received

This data presents the overall composition of services received by participants based on claims and encounters reported in the MMIS2. Services are grouped into the following categories: prescriptions, behavioral health services, and general somatic services. The services from the MMIS2 pharmacy file are grouped as prescription. Services are categorized as behavioral health if

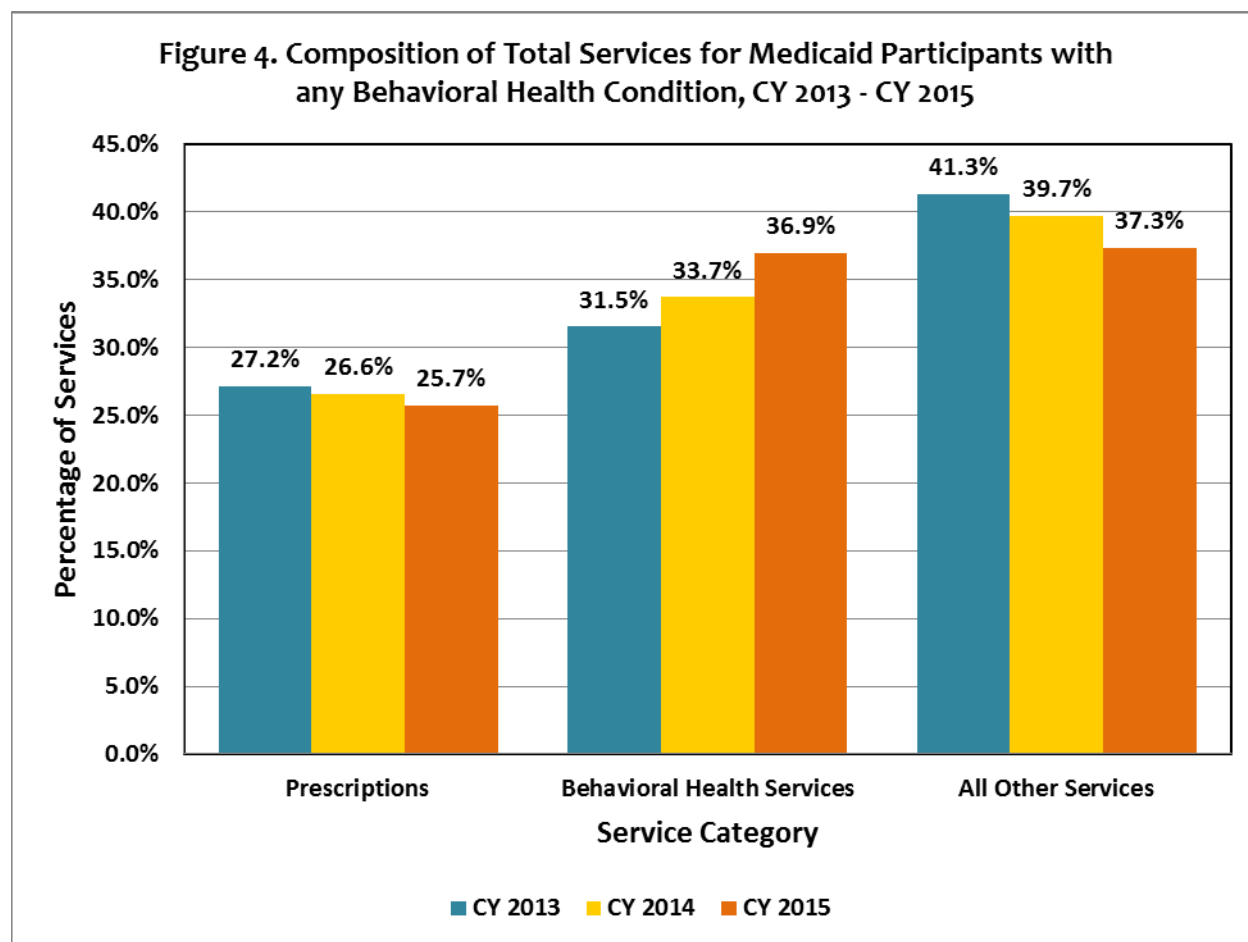
they have an invoice control number (ICN) beginning with "6" (meaning the claims were paid through Beacon), an ICD-10 primary diagnosis code that is listed in COMAR 10.09.70.02, or an ICD-9 primary diagnosis code from COMAR 10.09.70.02 if the ICD-10 was not available (generally before October 2015). If a service was not categorized as prescription or behavioral health-related, it is grouped into the "All Other Services" category.

Figure 3 presents the overall composition of services (categorized as prescriptions, behavioral health, and all other services) provided under the HealthChoice Program to individuals with a behavioral health condition (defined as having a mental health condition, substance use disorder, or both) in CY 2013, CY 2014 and CY 2015. The share of service categories varied slightly across the three years under study. Behavioral health services rose from 32.4 percent in CY 2013 to 35.1 percent in CY 2014 to 38.8 percent in CY 2015. Both the prescription and the "all other services" categories' share of total services moved in inverse proportion to the behavioral health services category.



***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Figure 4 presents the overall composition of services (categorized as prescriptions, behavioral health, and all other services) provided to individuals with a behavioral health condition in Medicaid (defined as having a mental health condition, substance use disorder, or both) in CY 2013, CY 2014 and CY 2015. The share of service categories varied slightly across the three years under study. Behavioral health services rose from 31.5 percent in CY 2013 to 33.7 percent in CY 2014 to 36.9 percent in CY 2015. Both the prescription and the "all other services" categories' share of total services moved in inverse proportion to the behavioral health services category.



*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Appropriate Service Utilization

This section addresses whether participants could connect with their medical homes and understand how to navigate them and appropriately access behavioral health services. With a greater understanding of the resources available to them, participants should be able to seek care in an ambulatory care setting before resorting to seeking care in the emergency department (ED) or allowing a condition to progress to the extent that it warrants an inpatient admission.

Ambulatory Care Visit Utilization

DHMH monitors ambulatory care utilization as a measure of access to care. An ambulatory care visit is defined as contact with a provider in a clinic, physician's office, or hospital outpatient department by an individual enrolled in HealthChoice at any time during the measurement year. This measure includes ambulatory care visits related to mental health disorders and substance use disorders. Medicaid participants should be able to seek care in an ambulatory care setting before using the ED for a non-emergent condition or allowing a condition to exacerbate to the extent that it requires an inpatient admission. In this section of the report, ambulatory care visits are measured using MCO encounter and FFS claims data.

Tables 9 presents data on the number and percentage of Medicaid enrollees who received at least one ambulatory care visit during the calendar year. Ambulatory care visit rates are consistently higher among enrollees with a MHD or SUD/MHD diagnosis across all three measurement years when compared to individuals with a SUD only diagnosis and those without a behavioral health diagnosis. Utilization rates by HealthChoice enrollees diagnosed with a SUD only declined from 81.7 percent in CY 2013 to 72.5 percent in CY 2014 to 71.3 percent in CY 2015. Data in these years were affected by a number of factors, including the ACA eligibility expansion in CY 2014 and the carve-out of SUD services in CY 2015. Utilization rates by enrollees with a MHD remained steady across all three measurement years at over 90 percent. As explained earlier, these numbers are conservative because they do not include full claims run out for CY 2015.

Table 9. Number and Percentage of Medicaid Enrollees with at Least One Ambulatory Care Visit, CY 2013 - CY 2015

	CY 2013			CY 2014			CY 2015		
	Number of Enrollees	Number of Enrollees with at Least One Ambulatory Care Visit	Percentage of Enrollees with at Least One Ambulatory Care Visit	Number of Enrollees	Number of Enrollees with at Least One Ambulatory Care Visit	Percentage of Enrollees with at Least One Ambulatory Care Visit	Number of Enrollees	Number of Enrollees with at Least One Ambulatory Care Visit	Percentage of Enrollees with at Least One Ambulatory Care Visit
	MHD Only			MHD Only			MHD Only		
HealthChoice Only	100,812	94,274	93.5%	130,234	121,467	93.3%	143,879	133,372	92.7%
All Medicaid Enrollees	141,317	131,121	92.8%	159,607	148,512	93.0%	175,900	162,555	92.4%
	SUD Only			SUD Only			SUD Only		
HealthChoice Only	19,625	16,032	81.7%	34,435	24,965	72.5%	33,886	24,163	71.3%
All Medicaid Enrollees	33,688	24,224	71.9%	36,936	26,616	72.1%	37,191	26,071	70.1%
	Both MHD and SUD			Both MHD and SUD			Both MHD and SUD		
HealthChoice Only	12,796	12,033	94.0%	23,911	21,972	91.9%	26,246	23,976	91.4%
All Medicaid Enrollees	21,053	19,362	92.0%	25,852	23,724	91.8%	28,761	26,125	90.8%
	Neither MHD nor SUD			Neither MHD nor SUD			Neither MHD nor SUD		
HealthChoice Only	830,310	642,193	77.3%	1,065,602	800,492	75.1%	1,105,317	814,677	73.7%
All Medicaid Enrollees	1,083,341	759,601	70.1%	1,284,756	881,709	68.6%	1,328,006	897,536	67.6%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Emergency Department Utilization

The primary role of the ED is to treat seriously ill and injured patients. To assess overall ED utilization, the Department measures the percentage of individuals with any period of enrollment who visited an ED at least once during the calendar year. This measure excludes ED visits that resulted in an inpatient hospital admission.

Tables 10 and 11 present data on the number and percentage of Medicaid enrollees who received an ED visit during the calendar year. Table 10 presents the number and percentage of enrollees with at least one ED visit. As has been consistently demonstrated in HealthChoice evaluations throughout the years, the ED utilization rate was greatest amongst enrollees with both a SUD and a MH disorder and lowest among enrollees not meeting either of these criteria. Although CY 2015 data is still being finalized, a downward trend is emerging as demonstrated by rates of ED utilization decline across all diagnosis categories between CY 2013 and CY 2015. Across diagnostic status of participants, when looking at HealthChoice participants compared to the Medicaid population overall, ED utilization was largely similar. Nevertheless, rates of ED visits were notably higher among HealthChoice participants with a SUD diagnosis or dual MH/SUD diagnoses than in the overall Medicaid population in CY 2013. These differences largely equalized by CY 2015.

Table 10. Number and Percentage of Medicaid Enrollees with at Least One ER Visit, CY 2013 - CY 2015

	CY 2013			CY 2014			CY 2015		
	All Medicaid Participants	Number of Participants with an ER Visit	Percentage of Participants with an ER Visit	All Medicaid Participants	Number of Participants with an ER Visit	Percentage of Participants with an ER Visit	All Medicaid Participants	Number of Participants with an ER Visit	Percentage of Participants with an ER Visit
	MHD Only			MHD Only			MHD Only		
HealthChoice Only	100,812	49,159	48.8%	130,234	64,030	49.2%	143,879	67,377	46.8%
All Medicaid Enrollees	141,317	68,829	48.7%	159,607	79,496	49.8%	175,900	83,606	47.5%
	SUD Only			SUD Only			SUD Only		
HealthChoice Only	19,625	12,585	64.1%	34,435	19,321	56.1%	33,886	18,333	54.1%
All Medicaid Enrollees	33,688	18,963	56.3%	36,936	20,871	56.5%	37,191	20,207	54.3%
	Both MHD and SUD			Both MHD and SUD			Both MHD and SUD		
HealthChoice Only	12,796	9,619	75.2%	23,911	17,653	73.8%	26,246	19,054	72.6%
All Medicaid Enrollees	21,053	14,978	71.1%	25,852	19,202	74.3%	28,761	21,006	73.0%
	Neither MHD nor SUD			Neither MHD nor SUD			Neither MHD nor SUD		
HealthChoice Only	830,310	258,393	31.1%	1,065,602	318,989	29.9%	1,105,317	309,137	28.0%
All Medicaid Enrollees	1,083,341	314,243	29.0%	1,284,756	361,631	28.1%	1,328,006	354,288	26.7%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 11 presents the average number of ED visits for Medicaid enrollees. The first column for each CY is the average number of visits per person across the entire population, regardless of whether the participants were users or no-users of EDs, The second column includes the average number of visits restricted to ED users only. Across all three measurement years, the rates remained largely the same.

Table 11. Average Number of ED Visits for Medicaid Enrollees, CY 2013-CY 2015

	CY 2013		CY 2014		CY 2015	
	Average Visits Per Person	Average Visits Per User	Average Visits Per Person	Average Visits Per User	Average Visits Per Person	Average Visits Per User
	MHD Only		MHD Only		MH Only	
HealthChoice Only	1.4	2.8	1.4	2.8	1.2	2.7
All Medicaid Enrollees	1.4	2.8	1.4	2.8	1.3	2.8
	SUD Only		SUD Only		SUD Only	
HealthChoice Only	1.9	3.0	1.6	2.8	1.6	2.9
All Medicaid Enrollees	1.9	2.9	1.6	2.9	1.6	2.9
	Both MHD and SUD		Both MHD and SUD		Both MHD and SUD	
HealthChoice Only	3.9	5.2	3.6	4.8	3.5	4.9
All Medicaid Enrollees	3.9	5.0	3.7	5.0	3.6	4.9
	Neither MHD nor SUD		Neither MH nor SUD		Neither MHD nor SUD	
HealthChoice Only	0.6	1.9	0.6	1.9	0.5	1.8
All Medicaid Enrollees	0.6	1.9	0.5	1.9	0.5	1.8

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Emergency Department (ED) Utilization

This measure classifies all FFS and MCO outpatient and inpatient ED visits as either somatic or behavioral health. ED visits were classified using an algorithm developed by the New York University Center for Health and Public Service Research (NYU).¹⁷ Behavioral health ED visits were defined as any visit with a primary diagnosis related to alcohol, drugs, or mental health. Somatic ED visits were defined as ED visits that were not classified as a behavioral health ED visit, including visits due to chronic conditions, injury, trauma, and infections. Behavioral health and somatic ED visits are considered mutually exclusive groups. There were 212 ED visits that could not be classified by the NYU algorithm in calendar year (CY) 2015 because the diagnosis code present on the claim or encounter was not included in the NYU algorithm.

Table 12 displays the number and percentage of participants with at least one ED visit by visit type and diagnosis for all Medicaid participants. Table 14 presents these data for participants with any enrollment in HealthChoice. Table 13 displays the total and average number of ED visits by visit type and diagnosis for all participants and among those who visited the ED at least once during the CY. The same analysis was also completed for participants enrolled in HealthChoice and is presented in

¹⁷ Billings, J., Parikh, N., & Mijanovich, T. (2000, November). Issue Brief: Emergency department use: The New York story. Retrieved from http://www.commonwealthfund.org/usr_doc/billings_nystory.pdf.

Table 15. All results are categorized based on the absence or presence of a substance use disorder (SUD) and/or mental health diagnosis using the criteria outlined earlier in the report.

Table 12. Number and Percentage of Medicaid Participants with at Least One ED Visit by Visit Type and Diagnosis, CY 2013 - CY 2015

CY 2013					
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit	Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit
MHD Only	141,317	15,722	11.1%	62,667	44.3%
SUD Only	33,688	3,417	10.1%	17,784	52.8%
MHD + SUD	21,053	6,623	31.5%	13,511	64.2%
CY 2014					
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit	Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit
MHD Only	159,607	19,823	12.4%	71,419	44.7%
SUD Only	36,936	4,548	12.3%	19,227	52.1%
MHD + SUD	25,852	9,423	36.4%	17,001	65.8%
CY 2015					
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit	Number of Participants with at Least 1 Visit	Percentage of Participants with at Least 1 Visit
MHD Only	175,900	19,819	11.3%	75,426	42.9%
SUD Only	37,191	4,620	12.4%	18,565	49.9%
MHD + SUD	28,761	10,389	36.1%	18,445	64.1%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 13. Total and Average Number of ED Visits for Medicaid Participants by Visit Type and MH and/or SUD Diagnosis, CY 2013 - CY 2015

CY 2013									
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User
MHD Only	141,317	28,840	0.2	15,722	1.8	164,550	1.2	62,667	2.6
SUD Only	33,688	5,321	0.2	3,417	1.6	50,057	1.5	17,784	2.8
MH + SUD	21,053	20,286	1.0	6,623	3.1	54,526	2.6	13,511	4.0
CY 2014									
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User
MHD Only	159,607	34,211	0.2	12,300	2.8	188,799	1.2	53,426	3.5
SUD Only	36,936	6,963	0.2	5,442	1.3	52,672	1.4	19,952	2.6
MH + SUD	25,852	28,221	1.1	17,219	1.6	67,290	2.6	35,053	1.9
CY 2015									
Behavioral Health Condition	All Medicaid Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User
MHD Only	175,900	35,130	0.2	19,819	1.8	191,165	1.1	75,426	2.5
SUD Only	37,191	9,086	0.2	4,620	2.0	50,032	1.3	18,565	2.7
MH + SUD	28,761	34,459	1.2	10,389	3.3	69,296	2.4	18,445	3.8

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 14. Number and Percentage of HealthChoice Participants with at Least One ED Visit by Visit Type and MH and/or SUD Diagnosis, CY 2013 - CY 2015

		CY 2013			
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants	Percentage of Participants	Number of Participants	Percentage of Participants
MHD Only	100,812	11,349	11.3%	44,634	44.3%
SUD Only	19,625	1,885	9.6%	11,969	61.0%
MH + SUD	12,796	4,290	33.5%	8,736	68.3%
		CY 2014			
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants	Percentage of Participants	Number of Participants	Percentage of Participants
MHD Only	130,234	15,987	12.3%	57,440	44.1%
SUD Only	34,435	3,955	11.5%	17,900	52.0%
MH + SUD	23,911	8,491	35.5%	15,622	65.3%
		CY 2015			
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit		Somatic ED Visit	
		Number of Participants	Percentage of Participants	Number of Participants	Percentage of Participants
MHD Only	143,879	16,109	11.2%	60,620	42.1%
SUD Only	33,886	3,960	11.7%	16,976	50.1%
MH + SUD	26,246	9,262	35.3%	16,773	63.9%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 15. Total and Average Number of ED Visits for HealthChoice Participants by Visit Type and MH and/or SUD Diagnosis, CY 2013 - CY 2015

CY 2013									
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of participants with a Visit	Average Visits per User
MHD Only	100,812	21,629	0.2	11,349	1.9	115,151	1.1	44,634	2.6
SUD Only	19,625	2,651	0.1	1,885	1.4	34,553	1.8	11,969	2.9
MH + SUD	12,796	13,490	1.1	4,290	3.1	36,931	2.9	8,736	4.2
CY 2014									
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User
MHD Only	130,234	27,847	0.2	15,987	1.7	149,003	1.1	57,440	2.6
SUD Only	34,435	6,036	0.2	3,955	1.5	48,436	1.4	17,900	2.7
MH + SUD	23,911	24,969	1.0	8,491	2.9	60,511	2.5	15,622	3.9
CY 2015									
Behavioral Health Condition	All HealthChoice Participants	Behavioral Health ED Visit				Somatic Health ED Visit			
		Number of Visits	Average Visits per Person	Number of participants with a Visit	Average Visits per User	Number of Visits	Average Visits per Person	Number of Participants with a Visit	Average Visits per User
MHD Only	143,879	28,841	0.2	16,109	1.8	150,944	1.0	60,620	2.5
SUD Only	33,886	8,016	0.2	3,960	2.0	45,289	1.3	16,976	2.7
MH + SUD	26,246	30,879	1.2	9,262	3.3	61,897	2.4	16,773	3.7

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Inpatient Utilization

To assess inpatient utilization, the Department measures the percentage of participants with any period of enrollment who had an inpatient admission during the calendar year. Inpatient admissions include all institutional services reported by Maryland hospitals as inpatient and includes both MCO and FFS encounters.

Table 16 presents the percentage of Medicaid enrollees with at least one MCO inpatient hospital admission by CY. Between CY 2013 and CY 2014, inpatient rates decreased for HealthChoice recipients with a SUD diagnosis and a dual SUD/MHD diagnosis, while rates increased slightly for those with a MH diagnosis. Based on available data, HealthChoice inpatient admissions will be lower in CY 2015 than in CY 2013 across all three diagnostic categories.

Table 16. Number and Percentage of Medicaid Enrollees with at Least One Inpatient Admission, CY 2013 - CY 2015

	CY 2013			CY 2014			CY 2015		
	All Participants	Number of Participants with an Inpatient Admit	Percentage of Participants with an Inpatient Admit	All Participants	Number of Participants with an Inpatient Admit	Percentage of Participants with an Inpatient Admit	All Participants	Number of Participants with an Inpatient Admit	Percentage of Participants with an Inpatient Admit
	MHD Only			MHD Only			MHD Only		
HealthChoice Only	100,812	13,753	13.6%	130,234	18,397	14.1%	143,879	18,613	12.9%
All Medicaid Enrollees	141,317	22,604	16.0%	159,607	27,272	17.1%	175,900	27,701	15.8%
	SUD Only			SUD Only			SUD Only		
HealthChoice Only	19,625	3,462	17.6%	34,435	5,444	15.8%	33,886	5,068	15.0%
All Medicaid Enrollees	33,688	4,275	12.7%	36,936	6,105	16.5%	37,191	5,787	15.6%
	Both MHD and SUD			Both MHD and SUD			Both MHD and SUD		
HealthChoice Only	12,796	4,774	37.3%	23,911	8,369	35.0%	26,246	8,794	33.5%
All Medicaid Enrollees	21,053	5,797	27.5%	25,852	9,303	36.0%	28,761	9,881	34.4%
	Neither MHD nor SUD			Neither MHD nor SUD			Neither MHD nor SUD		
HealthChoice Only	830,310	73,532	8.9%	1,065,602	83,785	7.9%	1,105,317	80,196	7.3%
All Medicaid Enrollees	1,083,341	101,973	9.4%	1,284,756	111,292	8.7%	1,328,006	107,536	8.1%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 17 presents the average number of inpatient admissions for Medicaid enrollees. The first column for each CY is the average number of admissions per person across the entire population, regardless of whether the participants were users or non-users. The second column includes the average number of admissions restricted to users with an inpatient admission only. The average number of admission per person for individuals within all three diagnostic categories declined or remained consistent between CY 2013 and CY 2015. The average number of visits for users of inpatient care declined or remained constant across all three years. The highest rates of utilization were seen in those with a dual SUD/MH diagnoses, independent of measurement year.

Table 17. Average Number of Inpatient Admissions for Medicaid Enrollees, CY 2013 - CY2015

	CY 2013		CY 2014		CY 2015	
	Average Admits Per Person	Average Admits Per User	Average Admits Per Person	Average Admits Per User	Average Admits Per Person	Average Admits Per User
	MHD Only		MHD Only		MHD Only	
HealthChoice Only	0.2	1.8	0.2	1.7	0.2	1.7
All Medicaid Enrollees	0.3	1.7	0.3	1.7	0.3	1.6
	SUD Only		SUD Only		SUD Only	
HealthChoice Only	0.3	1.7	0.3	1.6	0.2	1.6
All Medicaid Enrollees	0.2	1.7	0.3	1.6	0.3	1.6
	Both MHD and SUD		Both MHD and SUD		Both MHD and SUD	
HealthChoice Only	0.9	2.4	0.7	2.1	0.7	2.1
All Medicaid Enrollees	0.6	2.3	0.8	2.1	0.7	2.0
	Neither MHD nor SUD		Neither MHD nor SUD		Neither MHD nor SUD	
HealthChoice Only	0.1	1.2	0.1	1.2	0.1	1.2
All Medicaid Enrollees	0.1	1.2	0.1	1.2	0.1	1.2

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 18 compares the average length of inpatient stay (in days) for HealthChoice participants and Medicaid enrollees overall. In CY 2013, the average length of stay was highest for individuals with a MH diagnosis (7.5 days for those enrolled in HealthChoice and 9.3 days for Medicaid enrollees overall). Overall, the average length of stay decreased across all diagnostic categories between CY 2013 and 2015. This reduction may be due to claims run out issues. Notably, inpatient stay length was greater overall for those diagnosed only with a MHD compared to other groups independent of CY. This may suggest that these enrollees present with higher acuity symptoms than enrollees presenting with SUD or SUD/MH complicated diagnoses where management of solely withdrawal symptoms is warranted.

Table 18. Average Inpatient Length of Stay for Medicaid Enrollees, CY 2013 - CY 2015

	CY 2013			CY 2014			CY 2015		
	Total Number of Inpatient Days	Total Number of Inpatient Visits	Length of Stay (days)	Total Number of Inpatient Days	Total Number of Inpatient Visits	Length of Stay (days)	Total Number of Inpatient Days	Total Number of Inpatient Visits	Length of Stay (days)
	MHD Only			MHD Only			MHD Only		
HealthChoice Only	196,602	24,118	7.5	243,356	30,951	7.2	241,894	30,828	7.1
All Medicaid Enrollees	366,518	38,444	9.3	419,430	45,054	8.9	420,570	45,018	9.0
	SUD Only			SUD Only			SUD Only		
HealthChoice Only	33,891	5,949	5.2	47,926	8,849	4.9	44,231	8,194	4.9
All Medicaid Enrollees	43,197	7,380	5.4	54,015	9,872	5.0	50,556	9,355	4.9
	Both MHD and SUD			Both MHD and SUD			Both MHD and SUD		
HealthChoice Only	66,045	11,278	6.0	97,814	17,803	5.5	100,683	18,210	5.4
All Medicaid Enrollees	80,952	13,460	6.2	111,280	19,655	5.8	114,611	20,111	5.6
	Neither MHD nor SUD			Neither MHD nor SUD			Neither MHD nor SUD		
HealthChoice Only	453,026	89,403	4.5	529,445	103,185	4.5	501,306	97,699	4.6
All Medicaid Enrollees	690,746	127,382	4.9	742,401	138,458	4.8	692,336	131,706	4.7

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Percentage of Participants with at Least One 30-Day All-Cause-Hospital Readmission

Table 19 provides the all-cause readmission rates by behavioral health status. From CY 2013 to CY 2015, the all-cause readmission rate decreased for Medicaid participants with a mental health condition, a substance use disorder, and a co-occurring mental health and substance use disorder.

Table 19. Number and Percentage of Medicaid Participants with a Plan All-Cause Readmission (PCR) by Behavioral Health Status, CY 2013 - CY 2015*

Behavioral Health Condition	CY 2013			CY 2014			CY 2015		
	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission
MHD Only	16,745	2,801	16.7%	18,624	3,150	16.9%	20,120	3,260	16.2%
SUD Only	2,347	385	16.4%	3,052	430	14.1%	3,521	531	15.1%
MHD + SUD	4,015	1,137	28.3%	5,776	1,462	25.3%	7,164	1,766	24.7%
No MHD or SUD	28,596	2,340	8.2%	30,285	2,325	7.7%	31,779	2,661	8.4%
Total	51,703	6,663	12.9%	57,737	7,367	12.8%	62,584	8,218	13.1%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

*CY 2013 and CY 2014 data were calculated using 2015 HEDIS specifications, while CY 2015 data were calculated using HEDIS 2016 specifications. HEDIS 2016 specifications have updated identification methods and inclusion criteria.

As shown in Table 20, from CY 2013 to CY 2015, the all-cause readmission rate decreased slightly for Medicaid participants with a behavioral health condition (0.7 percent). However, the CY 2013 through CY 2015 rate (18.7, 18.4, and 18.0 percent) was substantially higher than the rate for Medicaid participants with no behavioral health condition (8.2, 7.7, and 8.4 percent) and the rate for total Medicaid participants (12.9, 12.8, and 13.1 percent).

Table 20. Number and Percentage of Medicaid Participants with a Plan All-Cause Readmission (PCR) by Behavioral Health Status, CY 2013 - CY 2015*

Behavioral Health Status	CY 2013			CY 2014			CY 2015		
	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission	Number of Participants with an Acute Inpatient Stay	Number of Participants with an All-Cause Readmission	Rate of Participants with an All-Cause Readmission
Behavioral Health Condition	23,107	4,323	18.7%	27,452	5,042	18.4%	30,805	5,557	18.0%
No Behavioral Health Condition	28,596	2,340	8.2%	30,285	2,325	7.7%	31,779	2,661	8.4%
Total	51,703	6,663	12.9%	57,737	7,367	12.8%	62,584	8,218	13.1%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Service Utilization: ACA Expansion Population Compared to Other Medicaid Enrollees

As a result of the ACA expansion, Medicaid enrollment increased significantly as did the number of enrollees accessing behavioral health services. This section presents data on differences in ambulatory care, ED, and inpatient admission utilization between ACA expansion enrollees and all other Medicaid recipients.

Table 21 shows that participants newly covered under the ACA have lower utilization nearly across the board for ambulatory care than other Medicaid participants. The only metric in which this cohort shows higher utilization is average visits per user among those with no behavioral health condition. This population averaged 5.5 ambulatory care visits whereas the non-ACA cohort averaged 5.2 visits. The most stark difference shown in Table 21 is that, among participants with no behavioral health condition, 55.1 percent of the entire ACA cohort had at least one visit, whereas 70.9 percent of other participants had at least one visit.

Table 21. Ambulatory Care Visit. Total, Average, and Percentage of Ambulatory Care Visits, All Medicaid Participants by Behavioral Health Status, ACA Expansion Adults vs. All Other Coverage Groups, CY 2015

Coverage Groups	Behavioral Health Diagnosis						All Others					
	All Medicaid Participants	Number of Visits	Average Visits per Person	Number of Participants with at Least 1 Visit	Average Visits per User	Percentage of Participants with at Least 1 Visit	All Medicaid Participants	Number of Visits	Average Visits per Person	Number of Participants with at Least 1 Visit	Average Visits per User	Percentage of Participants with at Least 1 Visit
ACA Expansion	66,113	536,720	8.1	53,427	10.0	80.8%	279,447	845,954	3.0	154,083	5.5	55.1%
All Other Coverage Groups	175,739	1,705,806	9.7	161,324	10.6	91.8%	1,048,559	3,848,748	3.7	743,453	5.2	70.9%
Total	241,852	2,242,526	9.3	214,751	10.4	88.8%	1,328,006	4,694,702	3.5	897,536	5.2	67.6%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 22 shows the average ED visits per person (1.9 vs. 1.5), average visits per user (3.4 vs. 3.0), and percentage of participants with at least one visit (55.8 percent vs. 50.0 percent) were higher for ACA participants compared to all participants with behavioral health conditions. For populations with only somatic conditions, the average visits per user were higher in ACA participants compared to all other coverage groups, while the percentage of participants with at least one visit were lower.

Table 22. Emergency Department Visit. Total, Average, and Percentage of Emergency Department Visits, All Medicaid Participants by Behavioral Health Status, ACA Expansion Adults vs. All Other Coverage Groups, CY 2015

Coverage Groups	Behavioral Health Condition						All Others					
	All Medicaid Participants	Number of Visits	Average Visits per Person	Number of Participants with at Least 1 Visit	Average Visits per User	Percentage of Participants with at Least 1 Visit	All Medicaid Participants	Number of Visits	Average Visits per Person	Number of Participants with at Least 1 Visit	Average Visits per User	Percentage of Participants with at Least 1 Visit
ACA Expansion	65,965	124,378	1.9	36,793	3.4	55.8%	279,322	136,905	0.5	71,124	1.9	25.5%
All Other Coverage Groups	175,885	264,843	1.5	88,026	3.0	50.0%	1,048,523	518,239	0.5	283,164	1.8	27.0%
Total	241,852	389,221	1.6	124,819	3.1	51.6%	1,327,845	655,144	0.5	354,288	1.8	26.7%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 23 shows that participants newly covered under the ACA had nearly identical utilization for inpatient care in CY 2015 as their counterparts in the rest of population, except in a few metrics. ACA expansion participants who have a behavioral health condition were roughly two percentage points more likely to have at least one inpatient admission than those in the rest of the population (19.3 vs. 17.4 percent). Participants with no behavioral health condition in the ACA expansion group were far less likely to have an inpatient admission than the rest of the population (5.0 vs. 8.9 percent) but ACA participants who had at least one admission during the year show a slightly higher average number of visits than the rest of the population (1.4 vs. 1.2).

Table 23. Inpatient Admissions. Total, Average, and Percentage of Inpatient Visits, All Medicaid Participants by Behavioral Health Status, "A" Coverage Groups vs. All Other Coverage Groups, CY 2015

Coverage Groups	Behavioral Health Condition						All Others					
	All Medicaid Participants	Number of Admits	Average Admits per Person	Number of Participants with at Least 1 Admit	Average Admits per User	Percentage of Participants with at Least 1 Admit	All Medicaid Participants	Number of Admits	Average Admits per Person	Number of Participants with at Least 1 Admit	Average Admits per User	Percentage of Participants with at Least 1 Admit
ACA Expansion	66,113	22,295	0.3	12,774	1.7	19.3%	279,447	19,589	0.1	13,862	1.4	5.0%
All Other Coverage Groups	175,739	52,189	0.3	30,595	1.7	17.4%	1,048,559	112,117	0.1	93,674	1.2	8.9%
Total	241,852	74,484	0.3	43,369	1.7	17.9%	1,328,006	131,706	0.1	107,536	1.2	8.1%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Medication Assisted Treatment Utilization by Individuals Diagnosed with a SUD

The Department recently announced that effective March 1, 2017, it will implement a new payment policy for community-based Opioid Treatment Programs (OTPs) through its methadone re-bundling initiative.¹⁸ This initiative was developed to align the Department's payment policy to clinical best practices that indicate medication assisted treatment (MAT) and counseling together result in better patient outcomes than treating patients with MAT alone. Under the re-bundling initiative, reimbursement for counseling services will be reimbursed separately from the weekly bundled rates for Methadone Maintenance and Buprenorphine Maintenance. OTPs may refer patients with a clinical necessity for more intensive outpatient treatment to a provider type 50 (BHA-certified programs). Separating out counseling services will also facilitate improved data collection to monitor actual services provided and outcomes. In addition, participants in a stable maintenance phase of treatment will no longer be required to be seen in person each week of treatment and instead will be required to have one face-to-face visit each month, as clinically appropriate.

Table 24 shows the number and percentage of enrollees with a SUD or a SUD and an MH disorder with at least one methadone treatment. Between CY 2013 and CY 2014, the percentage of individuals with a SUD with at least one methadone treatment increased by 6.4 percentage points for HealthChoice participants. Rates continued to increase in CY 2015 to 41.3 percent. However, utilization of methadone therapy increased less markedly for individuals diagnosed with both a SUD and MH disorder from 32.9 percent in CY 2013 to 33.8 percent in CY 2015.

¹⁸ Additional information on the initiative can be found here, <http://dhmh.maryland.gov/bhd/Pages/Integration-Efforts.aspx>.

Table 24. Number and Percentage of Medicaid Enrollees with Methadone Treatment, CY 2013 - CY 2015

	CY 2013			CY 2014			CY 2015		
	Number of Enrollees	Enrollees w/ Methadone	% of Enrollees w/ Methadone	Number of Enrollees	Enrollees w/ Methadone	% of Enrollees w/ Methadone	Number of Enrollees	Enrollees w/ Methadone	% of Enrollees w/ Methadone
	SUD Only			SUD Only			SUD Only		
HealthChoice	19,625	6,143	31.3%	34,435	12,996	37.7%	33,886	13,998	41.3%
All Medicaid	33,688	12,297	36.5%	36,936	13,743	37.2%	37,191	15,029	40.4%
	Both MHD and SUD			Both MHD and SUD			Both MHD and SUD		
HealthChoice	12,796	4,204	32.9%	23,911	7,799	32.6%	26,246	8,868	33.8%
All Medicaid	21,053	6,795	32.3%	25,852	8,227	31.8%	28,761	9,476	32.9%
	SUD Only <i>and</i> Both MHD and SUD			SUD Only <i>and</i> Both MHD and SUD			SUD Only <i>and</i> Both MHD and SUD		
HealthChoice	32,421	10,347	31.9%	58,346	20,795	35.6%	60,132	22,866	38.0%
All Medicaid	54,741	19,092	34.9%	62,788	21,970	35.0%	65,952	24,505	37.2%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 25 presents the number of methadone treatment service units provided by Opioid Treatment Programs (OTPs) by month from CY 2013 to CY 2015. These include the number of methadone treatment service units as well as the number of enrollees who received methadone treatment through an OTP for each month of these calendar years. The number of service units as well as those to whom services were provided notably increased since 2013, suggesting increased utilization and adherence to SUD-related services during the observation years described here.

Table 25. Number of Methadone Treatment Service Units Provided by OTPs and Enrollees Receiving Methadone Treatment through OTPs per Month, January 2013 - December 2015

Month	CY 2013		CY 2014		CY 2015	
	Number of Events	Number of People	Number of Events	Number of People	Number of Events	Number of People
January	52,580	12,892	63,377	14,675	75,398	16,933
February	50,534	13,029	58,162	14,954	66,042	17,089
March	57,193	13,219	65,992	15,479	77,011	17,358
April	55,879	13,289	63,211	15,726	69,361	17,315
May	56,618	13,343	67,244	15,862	71,510	17,470
June	53,584	13,237	69,444	15,982	76,522	17,705
July	56,689	13,355	64,285	15,878	71,622	17,504
August	57,800	13,488	68,604	15,839	78,825	17,744
September	58,554	13,698	65,289	15,824	69,902	17,779
October	55,304	13,681	66,718	15,761	77,229	17,878
November	58,513	13,956	63,584	15,598	79,157	18,199
December	61,643	14,186	66,009	15,923	73,136	18,260
Monthly Average	56,241	13,448	65,160	15,625	73,810	17,603

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 26 shows the units of buprenorphine dispensed by OTPs and the number of recipients of buprenorphine dispensing by OTPs monthly between January 2013 and December 2015. The number of recipients increased midyear in each year documented here. Overall, buprenorphine dispensing by OTPs has increased over time suggesting greater numbers of enrollees participating in active SUD treatment and increased enrollment during each CY.

Table 26. Units of Buprenorphine Dispensing by OTPs and Enrollees Receiving Buprenorphine through OTPs per Month, January 2013 - December 2015

Month	2013		2014		2015	
	Number of Events	Number of People	Number of Events	Number of People	Number of Events	Number of People
January	656	35	2,937	114	6,006	238
February	533	34	2,423	118	6,042	315
March	537	37	2,770	126	8,463	415
April	663	65	2,800	144	8,089	415
May	1,035	108	3,406	143	9,885	426
June	1,366	78	3,480	177	13,914	617
July	1,910	97	3,791	176	14,954	644
August	2,021	112	4,038	177	8,294	376
September	2,011	117	4,208	187	7,537	396
October	2,687	124	4,147	192	17,468	726
November	2,539	111	4,150	190	17,703	741
December	2,756	99	4,493	207	19,344	786
Monthly Average	1560	85	3,554	163	11,475	508

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 27 shows the number of buprenorphine prescriptions prescribed by DATA 2000 Waiver Physicians and the number of recipients of those prescriptions monthly between January 2013 and December 2015. Overall, buprenorphine prescriptions and individuals filling prescriptions have steadily increased over time. This is likely to increase further since the federal government has recently changed the rules regarding the number of patients buprenorphine providers can assist from 100 patients to 275 patients and has increased the provider pool to include nurse practitioners and physician assistants with special training.

Table 27. Number of Buprenorphine Prescriptions and Enrollees Filling these Prescriptions per Month, January 2013 – December 2015

Month	2013		2014		2015	
	Number of Prescriptions	Number of People	Number of Prescriptions	Number of People	Number of Prescriptions	Number of People
January	8,468	5,256	9,017	5,794	10,309	6,837
February	7,503	5,097	8,695	5,827	9,911	6,863
March	8,045	5,334	9,560	6,110	11,396	7,271
April	8,409	5,445	10,078	6,303	11,235	7,217
May	8,710	5,386	10,264	6,407	10,807	7,193
June	8,113	5,346	10,122	6,450	11,328	7,243
July	8,878	5,531	10,872	6,596	11,825	7,377
August	8,590	5,497	9,805	6,406	11,116	7,328
September	8,070	5,434	10,037	6,450	11,295	7,260
October	9,096	5,636	10,580	6,517	11,473	7,358
November	8,405	5,586	9,211	6,192	11,171	7,237
December	8,877	5,621	10,639	6,538	12,420	7,428
Monthly Average	8,430	5,431	9,907	6,299	11,191	7,218

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Table 28 shows available data regarding the units of Naltrexone dispensing by OTPs and the number of enrollees receiving Naltrexone from an OTP each month from January 2013 through 2015. Due to low utilization rates, data was largely unavailable with the exception of months in 2014. In part due to this lack of data, it is difficult to describe a clear pattern of data regarding both units of dispensing and enrollees receiving Naltrexone across the CYs surveyed in this report.

Table 28. Units of Naltrexone Dispensing by OTPs and Enrollees Receiving Naltrexone through OTPs per Month, January 2013 - December 2015

Month	2013		2014		2015	
	Number of Events	Number of People	Number of Events	Month	Number of Events	Number of People
January	10	9	10	10	*	*
February	*	*	10	10	*	*
March	8	*	19	18	*	*
April	*	*	19	18	*	*
May	*	*	18	16	*	*
June	*	*	14	13	*	*
July	*	*	29	26	*	*
August	*	*	17	17	*	*
September	*	*	24	24	*	*
October	12	12	17	17	*	*
November	9	9	20	20	*	*
December	*	*	27	25	*	*
Monthly Average	10	10	19	18	*	*

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

* cells <10 suppressed

Table 29 shows the number of Naltrexone prescriptions and the number of enrollees receiving those prescriptions each month from January 2013 through December 2015. While the number of Naltrexone prescriptions and enrollees receiving prescriptions remain relatively low, they have slowly increased since January 2013.

Table 29. Number of Naltrexone Prescriptions and Enrollees Filling these Prescriptions per Month, January 2013 – December 2015

	2013		2014		2015	
Month	Number of Prescription	Number of People	Number of Prescriptions	Number of People	Number of Prescriptions	Number of People
January	240	199	288	246	407	360
February	229	199	259	223	425	383
March	240	201	240	208	490	427
April	240	205	276	240	469	409
May	252	207	276	241	439	385
June	207	179	324	289	528	455
July	255	211	315	266	517	464
August	262	214	316	276	552	482
September	236	203	346	303	517	454
October	271	221	348	298	536	481
November	207	177	337	294	565	501
December	225	188	350	293	653	557
Monthly Average	239	200	306	265	508	447

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Attention-Deficit/Hyperactivity Disorder (ADHD) Medication and Follow-Up Care Visits

This measure explores follow-up care for children prescribed a medication for ADHD. HEDIS Technical Specification Volume 2, 2016 defines this measure and provides the list of medications for ADHD. This measure specifies two phases: Initiation Phase evaluates the rate at which children receive at least one follow-up visit within 30 days after their first ever ADHD prescription. Continuation and Maintenance Phase evaluates the rate at which children receive at least two follow-up visits in the range of 31 – 300 days (10 months) after their first ever ADHD prescription.

The Initiation Phase measure excludes children who were not continuously enrolled for 120 days prior to and 30 days after the date the individual filled their first ever ADHD prescription. It also excludes children who had an acute inpatient visit for mental health or chemical dependency in the 30 days after filling their first ever ADHD prescription.

The Continuation and Maintenance Phase measure excludes individuals from the Initiation Phase cohort who did not maintain continuous coverage in the 10 months following their first ever ADHD prescription. It also excludes children who did not continue to fill ADHD prescriptions for 10 months. Finally, it excludes children who had an acute inpatient visit for mental health or chemical dependency in the 10 months after filling their first ever ADHD prescription.

Table 30 shows the number and percentage of children enrolled in Medicaid who were newly prescribed a medication for Attention-Deficit/Hyperactivity Disorder (ADHD) and received a follow-up care visit by phase for CY 2013 through CY 2015. The number and percentage of participants who received an ADHD medication and follow-up visit during the initiation phase increased from 3,927 (59.2 percent) in CY 2013 to 4,450 (61 percent) in CY 2015. The number and percentage of participants in the continuation and maintenance phase who received an ADHD medication and follow-up visit also increased from 913 (73.3 percent) in CY 2013 to 1,187 (74.5 percent) in CY 2015.

Table 30. Number and Percentage of Children Enrolled in Medicaid Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication and Follow-Up Care Visits by Phase, CY 2013 - CY 2015*

Phase	CY 2013			CY 2014			CY 2015		
	Total Eligible Participants	Participants Receiving Follow-Up Visit(s)		Total Eligible Participants	Participants Receiving Follow-Up Visit(s)		Total Eligible Participants	Participants Receiving Follow-Up Visit(s)	
		Number	Rate		Number	Rate		Number	Rate
Initiation	6,635	3,927	59.2 %	7,684	4,564	59.4%	7,297	4,450	61.0%
Continuation and Maintenance	1,245	913	73.3 %	1,782	1,277	71.7%	1,593	1,187	74.5%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

*CY 2013 and CY 2014 data were calculated using 2015 HEDIS specifications, while CY 2015 data were calculated using HEDIS 2016 specifications. HEDIS 2016 specifications have updated identification methods and inclusion criteria.

Table 31 shows the number and percentage of children enrolled in HealthChoice who were newly prescribed a medication for Attention-Deficit/Hyperactivity Disorder (ADHD) and received a follow-up care visit by phase for CY 2013 through CY 2015. The number and percentage of participants who received an ADHD medication and follow-up visit during the initiation phase increased slightly from 3,883 (59.1 percent) in CY 2013 to 4,420 (61.2 percent) in CY 2015. The number of participants in the continuation and maintenance phase who received an ADHD medication and follow-up visit also increased slightly from 898 (73.2 percent) in CY 2013 to 1,183 (75.8 percent) in CY 2015.

Table 31. Number and Percentage of Children Enrolled in HealthChoice Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication and Follow-Up Care Visits by Phase, CY 2013 - CY 2015*

Phase	CY 2013			CY 2014			CY 2015		
	Total Eligible Participants	Participants Receiving Follow-Up Visit(s)		Total Eligible Participants	Participants Receiving Follow-Up Visit(s)		Total Eligible Participants	Participants Receiving Follow-Up Visit(s)	
		Number	Rate		Number	Rate		Number	Rate
Initiation	6,572	3,883	59.1%	7,603	4,522	59.5%	7,228	4,420	61.2%
Continuation and Maintenance	1,226	898	73.2%	1,758	1,265	72.0%	1,581	1,183	75.8%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

*Data were calculated using 2016 HEDIS specifications.

V. Jurisdictional Issues

In order to assess access issues at the jurisdictional level, the Department took a three-pronged approach: (1) reviewed federal shortage designations recently analyzed by the Office of Primary Care Access at DHMH¹⁹; (2) assessed provider participation by jurisdiction for five different provider types in the public behavioral health system; and (3) surveyed providers within the public behavioral health system to assess perceived treatment gaps.

Federal Shortage Designations

The federal government uses shortage designations to identify geographic areas and populations with insufficient health care resources. The Maryland Department of Health and Mental Hygiene’s Primary Care Office works with the Health Resources and Services Administration (HRSA), the responsible federal agency, to establish three types of federal shortage designations in Maryland: (1) Health Professional Shortage Areas (HPSAs), (2) Medically Underserved Areas (MUAs), and (3) Medically Underserved Populations (MUPs).

Health Professional Shortage Areas

HRSA uses a complex methodology to identify HPSAs based on types of professional discipline, geographic unit, and population. HRSA classifies HPSAs under three different health professional disciplines (primary care, dental care, and mental health care) and under three types of geographic units (whole counties, multiple counties, or sub-counties, such as census tracts based on established neighborhoods). The methodology also identifies certain populations with shortages, e.g., low-income, homeless, Medicaid, seasonal tourists, etc. using specific population data. Thus, the entire population or only a certain portion of the population in a county may reside within or be

¹⁹ <http://phpa.dhmm.maryland.gov/opca/docs/Final%20Maryland%20Needs%20Assessment%20040816.pdf>

designated as experiencing shortages of certain health professionals based on federal criteria. Certain types of facilities may also be eligible as HPSA facilities, such as prisons, mental health hospitals, Federally Qualified Health Centers (FQHCs), or other public or non-profit facilities.

HPSAs are eligible for resources from more than 30 federal programs and other benefits, including federal workforce development programs and enhanced Medicare reimbursement. When an area or facility is approved, it is given a HPSA designation and score by HRSA which is utilized by the community to recruit and retain providers for various workforce programs.

The state of Maryland has HPSAs for primary care (32 HPSA designations encompassing 791,181 Marylanders), dental care (26 HPSA designations covering 522,034 residents), and mental health (35 HPSAs covering 1,333,806 residents). The combined HPSA designations total 93 HPSA (not including facility designations) in Maryland. Carroll and Howard Counties were the only jurisdictions with no HPSA designations of any kind. It is important to note that there is not a HPSA designation for substance use providers.

In 2015, a total of 23 percent of the State's population resided in the mental health HPSAs. Jurisdictions with 100 percent of their resident population residing in mental health HPSAs include Calvert, Caroline, Cecil, Charles, Garrett, Harford, Kent, Queen Anne's, Saint Mary's, Somerset, Washington, Wicomico, and Worcester Counties. With the exception of Talbot County, the entire Eastern Shore is considered a mental health HPSA. When compared to the Statewide percentage, Allegany and Dorchester Counties had a higher percentage of people residing in a mental health care HPSA. The percent of population in Baltimore City residing in a mental health care HPSA was very similar to the Statewide percentage at 25 percent.

Medically Underserved Areas and Medically Underserved Populations

MUAs and MUPs are federally-designated locations or population groups that have a shortage of primary care resources. MUAs/MUPs are designated based on four criteria: infant mortality rate, percent of the population living in poverty, percentage of the population over the age of 65, and the population to primary care provider ratios. MUAs are for distinct geographic areas such as counties, census tracts, or minor civil divisions. MUPs are for specific population groups, such as low-income individuals, or seasonal or migrant farmworkers. MUPs can also be recommended at the Governor's discretion per federal criteria. Federal approval of a MUA or MUP qualifies the designated area or population for eligibility as a Federally Qualified Health Center.

Medically Underserved Areas

As of 2015, there were 46 Medically Underserved Areas (MUA) in Maryland, encompassing more than 974,000 Maryland residents. Some MUA designations in Allegany, Charles, Queen Anne's, Saint Mary's, Washington, and Wicomico Counties are for minor civil divisions rather than census tracts; therefore, exact population figures are not available for these counties. Howard County is the only jurisdiction that does not have any MUA or MUP designation.

While Baltimore City had the largest number of MUA designations at 15, it did not have the largest proportion of its population (77.3 percent) residing in a MUA designated area, compared to other

Maryland jurisdictions. Calvert, Caroline, Garrett, Kent, Somerset, and Worcester Counties each have 100 percent of their populations residing in MUA designations. Among Maryland's 24 jurisdictions (23 counties and Baltimore City), 20 have at least one MUA designation.

Medically Underserved Populations

Thirteen MUPs in Maryland cover more than 142,000 residents. Ten of Maryland's 24 jurisdictions have a MUP designation. Among these 10 jurisdictions, two have multiple MUP designations; Anne Arundel County with two, and Prince George's County with three. The jurisdictions with the largest percentages of population covered by MUP designations are Carroll, Dorchester, and Wicomico Counties, which have 14 percent, 37.3 percent, and 18.5 percent of their populations covered, respectively.

Local Assessment of Behavioral Health Coverage

In order to meet the requirements of the Joint Chairmen's Report, DHMH conducted a deeper analysis of participation in the public behavioral health system for 5 different provider types: (1) Outpatient Mental Health Clinics (OMHC); (2) Opioid Treatment Programs (OTP); (3) Ambulatory Substance Use Disorder Programs; (4) Intermediate Care Facilities - Addiction; and (5) Federally Qualified Health Centers. While there are additional provider types that play a critical role in the public behavioral health system, the Department chose to focus on these 5 categories given their critical role in the health care safety net. In some instances, a provider may have multiple levels of licensure. Participation by provider type varies by jurisdiction; however, it is apparent that both mental health and SUD provider participation is lower in areas that are designated as mental health HPSAs. There are only 10 jurisdictions in the State that have at least one of each of these 5 provider types that participate in the public behavioral health system.²⁰

OMHCs provide a range of mental health services to meet an individual's needs in order to promote recovery and resiliency. OMHC services include: mental health treatment, including individual, family and group therapy; co-occurring substance use treatment; medication services; and on-call and crisis intervention services. A total of 23 out of 24 jurisdictions have at least one OMHC that participates in the public behavioral health system.²¹ On average, Maryland has 10 OMHCs per jurisdiction with a median of 5 OMHCs per jurisdiction. The entire population for 13 jurisdictions reside in a mental health HPSA. All 13 have 10 or less than 10 OMHCs within their jurisdictions, and 9 of the 13 are below the statewide median of 5. They are as follows:

- Calvert (4 OMHCs);
- Caroline (3 OMHCs);
- Cecil (3 OMHCs);

²⁰ Allegany, Anne Arundel, Baltimore, Carroll, Frederick, Montgomery, Prince George's, Saint Mary's, and Wicomico counties, and Baltimore City have at least one of each of these 5 provider types.

²¹ Queen Anne's County lacks an OMHC.

- Charles (8 OMHCs);
- Garrett (1 OMHC);
- Harford (7 OMHCs);
- Kent (1 OMHC);
- Queen Anne's (No OMHC);
- Saint Mary's (4 OMHCs);
- Somerset (3 OMHCs);
- Washington (10 OMHCs);
- Wicomico (6 OMHCs); and
- Worcester (4 OMHCs).

With 5 OMHCs each, Allegany and Dorchester Counties also have high percentages of people residing in mental health care HPSAs. Unlike the counties listed above, they do not have 100 percent of their residents within these HPSAs, but the percentage is higher when compared to the rest of the state. On the other hand, Baltimore City with a total of 39 OMHCs has a very similar population percentage residing in a mental health care HPSA as the Statewide percentage at 25 percent.

Ambulatory Substance Use Disorder Programs

Ambulatory Substance Use Disorder Programs offer ASAM level 1 outpatient counseling, level 2.1, intensive outpatient treatment, level 2.5, partial hospitalization, and ambulatory withdrawal management; however, many of these programs are also certified as OTPs and dispense methadone and/or buprenorphine. Outpatient SUD programs provide less than 9 hours of service per week. Intensive outpatient services provide more than 9 hours of service per week, and partial hospitalization services provide 20 or more hours of service per week. There are roughly 225 of these programs participating in the public behavioral health system with at least one in every jurisdiction. On average, each jurisdiction has 9 programs, with a median of 5. Only four counties - Caroline, Garrett, Kent and Somerset - have only one program. As noted previously, these four counties are also considered mental health HPSAs.

Over half (117) of the State's Ambulatory Substance Use Disorder programs are concentrated in the Central Maryland region (Anne Arundel, Baltimore, Carroll, Howard, and Harford Counties, and Baltimore City). Of that amount, roughly 50 percent (62 programs) of those are in Baltimore City. The remainder of the programs in the Central region are concentrated predominantly in Anne Arundel (17 programs) and Baltimore (22 programs) Counties. Carroll (7 programs), Harford (6 programs), and Howard (3 programs) have fewer Ambulatory Substance Use Disorders programs participating in their jurisdictions than compared to the rest of the Central region.

Approximately 15% of Ambulatory Substance Use Disorder programs participating in the public behavioral health system are located on the Eastern Shore. The lower Eastern Shore (Somerset, Wicomico and Worcester Counties) has the highest concentration with 16 Ambulatory Substance Use Disorder programs. On the mid-shore (Caroline, Dorchester, and Talbot Counties) and the upper shore (Cecil, Kent and Queen Anne's Counties), there are only 9 and 8 Ambulatory Substance Use Disorder programs, respectively for each tri-county area. About 16% (36) of these programs are concentrated in the DC metro region (Montgomery and Prince George's counties). Nearly 12% of

are located in Western Maryland: Allegany (5), Frederick (9), Washington (11), and Garrett (1) Counties. Southern Maryland (Calvert, Charles, and Saint Mary's Counties) has 14 Ambulatory Substance Use Disorder programs.

Opioid Treatment Programs

OTPs are certified to provide medication assisted treatment - a clinical intervention that combines the use of medications and substance use disorder counseling - throughout the State of Maryland. The majority of these programs dispense methadone and/or buprenorphine. However, individual physicians who may be prescribing buprenorphine in other community settings are not considered OTPs. The Department's plans to expand buprenorphine access are highlighted elsewhere in this report.

A Statewide OTP needs assessment has been completed, the estimated difference between need and capacity was captured in a recent study conducted by the Department's Behavioral Health Administration. It is important to note that this report does not take into account buprenorphine prescribing that occurs outside of OTPs. A copy of this report is included as an appendix. There are over 29,000 individuals in need of OTP service over and above the OTP capacity of 32,422 treatment slots. Proportionally Prince George's County and Baltimore County have a significantly higher need over capacity than any of the remaining 22 jurisdictions. An analysis of providers enrolled in the public behavioral health system reveals there are significantly less OTPs Statewide - namely on the Eastern Shore - in comparison to other Ambulatory Substance Use Disorder programs. A total of seven counties do not have an OTP that participates in the public behavioral health system. With the exception of Garrett County, all of these jurisdictions are on the Eastern Shore.²² It is worth noting that all the counties that lack an OTP are also designated as a mental health HPSA. In these areas, this presents additional challenges in accessing services for individuals with co-occurring mental health disorders and SUDs.

When assessing coverage at a regional rather than jurisdictional level, it is clear that Maryland has more robust OTP access in the Central Maryland region (Anne Arundel, Baltimore, Carroll, Howard, and Harford Counties, and Baltimore City). However in other regions of the State, such as the lower Eastern Shore (Somerset, Wicomico and Worcester Counties), there is only one OTP participating in the public behavioral health system. In the Mid-Shore (Caroline, Dorchester, and Talbot Counties) and the Upper Shore (Cecil, Kent and Queen Anne's Counties), there are only two OTPs for each tri-county area. While there are multiple OTPs in Allegany, Frederick and Washington Counties, Garrett County lacks a single OTP. Southern Maryland (Calvert, Charles, and Saint Mary's Counties) each have one OTP. In the DC metro region (Montgomery and Prince George's Counties), there are a total of six OTPs between the two jurisdictions.

²² Counties without a certified drug clinic include Caroline, Dorchester, Garrett, Kent, Somerset, Queen Anne's, and Worcester.

Intermediate Care Facilities for Addiction

Intermediate Care Facilities for Addiction (ICF-A) provide intensive (24-hour staffing) SUD treatment in a residential setting. Due to federal payment policy, the funding of these facilities is limited within the public behavioral health system. Principally, Medicaid only reimburses for services provided to youth under the age of 21 years in ICF-As. For adults 21 years or older, ICF-A services are available through a fixed amount of State-only funding. ICF-As are the only providers discussed in this report where such a federal payment prohibition exists. Since Medicaid is the primary payor of behavioral health services nationally, this has likely impacted the expansion of these services in other jurisdictions in the State.

There are a total of 21 ICF-As participating in the public behavioral health system and approximately 50% of counties have an ICF-A. Over 20 percent are located in Baltimore City. Western Maryland (Allegany, Carroll, Frederick, Garrett, and Washington Counties) have 5 ICF-As between the five jurisdictions. There is one each located on the Lower Shore (Somerset, Wicomico and Worcester Counties), Mid Shore (Caroline, Dorchester, and Talbot Counties) and Upper Shore (Cecil, Kent and Queen Anne's Counties). Southern Maryland (Calvert, Charles, and Saint Mary's Counties) have 2 ICF-As, both located in Saint Mary's County. The remainder of the ICF-As are in Anne Arundel (3 ICF-As), Baltimore (1 ICF-A) Montgomery (1 ICF-A), Prince George's (1 ICF-A) Counties.

Governor Hogan has made access to these services a top priority. Specifically, the A.F. Whittsitt Center has been restored to 40-bed capacity resulting in greater access on the Upper Shore. As of November 2016, the A.F. Whittsitt Center is operating at the full bed capacity of 40. The most recent admission data reflects the following:

- Average admissions: 60 per month.
- Current wait list: Men: 20, Women: 15.
- Average length of days on the waitlist: Men: 14, Women: 10.

In general, an individual can be admitted within two days after receipt of the referral form. The A. F. Whittsitt Center has entered into an agreement with the University MD, Shore Medical Center at Chestertown to offer admission to individuals seen in the ED after a Narcan/Naloxone administration or other opioid-related ED visits.

Federally Qualified Health Centers

Federally Qualified Health Centers (FQHCs) are community-based health care providers funded by the federal government to provide low-cost care to underserved populations. FQHCs are located in or near a federally-designated MUA to serve the MUA residents and/or others in a MUP. These centers provide a comprehensive array of health care and supportive services. In many instances, FQHCs offer integrated mental health and/or SUD services, including medication assisted treatment, traditional medical care and preventive health service, family planning, and HIV/AIDS services. One FQHC in Garrett County also participates in Medicaid's telehealth program to provide psychiatric services to their patients. FQHCs receive federal funding under Section 330 of the Public Health Service Act. They are eligible for enhanced Medicare and Medicaid reimbursement, receive

medical malpractice coverage through the Federal Tort Claims Act, and may purchase prescription and nonprescription medications at reduced cost through the 340B Drug Pricing Program.

In addition to FQHCs, there are Federally Qualified Health Center look-alikes (FQHC-LAs) and Rural Health Centers (RHCs), which are organizations that meet all of the eligibility requirements of an FQHC, but do not receive federal funding. These organizations are eligible to receive most benefits offered to FQHCs. Maryland does not have any look-alikes or RHCs.

At the end of 2015, there were 130 service site locations for FQHCs in Maryland. A FQHC may operate multiple service sites; however, the administrative site is not included in this count. In 2016, five additional sites were added bringing the total to 135 service site locations, 36 of which are located in Baltimore City. The next highest concentrations of FQHC locations are in Montgomery County with 17, Caroline County with 15, Prince George's County with 10, Talbot and Wicomico Counties with eight each, followed by Anne Arundel and Washington counties with six each. Only Calvert and Carroll Counties have no FQHC sites. Fifty-three satellite sites of FQHCs with headquarters in Washington D.C. are located in Anne Arundel (6), Montgomery (17) and Prince George's (30) Counties and are included in the total number of 135 service sites for Maryland.

Provider Survey

Through Beacon Health Options, the Department disseminated a survey to providers in the public behavioral health system to assess gaps in mental health and substance use treatment. The survey received 110 responses.²³ With regards to service provision, the vast majority of respondents indicated that they provided outpatient mental health services (71.7 percent), psychiatric rehabilitation services (35.8 percent), mental health case management (19.8 percent), and mental health crisis services (19.8 percent). For substance use disorder treatment, the majority of respondents noted that they provided ASAM level one counseling (41.5 percent), ASAM Level 2.1 intensive outpatient counseling (33 percent), buprenorphine treatment (29.2 percent), and other medication assisted treatment, such as naltrexone (17 percent). A small group of providers noted that they provided residential substance use treatment:

- ASAM Level 3.1 low intensity (4.7 percent);
- ASAM Level 3.3 or 3.5 medium intensity (6.6 percent);
- ASAM Level 3.7 high intensity (6.6 percent);
- ASAM Level 3.7D high intensity detox (8.5 percent).

Notably, 70.6 percent of respondents indicated that they did not have a waitlist for new patients. Of the providers that did report a waitlist, wait times reported ranged from less than one week (21.9

²³ Nearly half of the respondents (46.4 percent) indicated that they provided both mental health and substance use services. The remainder identified as providing mental health services only (39.1 percent), or substance use services only (11.8 percent). A small percentage of survey respondents (roughly 3 percent) reported that they provided neither substance use nor mental health services. Respondents were asked to identify all regions of the state that they served; the majority served the Central Maryland region (52.7%); the DC Capital region (22.7 percent); Western Maryland (20 percent);, and the Lower Shore (19.1 percent). There were fewer respondents who reported serving Southern Maryland (12.7 percent), the Mid Shore (12.7 percent) and the Upper Shore (9.1 percent).

percent) to more than one month (28.1 percent). The majority of respondents reported wait times in the two-to-three week range (34.4 percent), with a small group of providers reporting wait times of one month (15.6 percent).

The majority of respondents noted that they are already serving justice involved populations (86.1 percent). Of those reporting that they provided services to justice-involved individuals, approximately 64 percent noted that it made up a small portion of their patient mix (0 - 25 percent of their patients). While a small subset (5.5 percent) noted 76 - 100 percent of their patients were justice-involved. The remaining respondents indicated 26 to 50 percent of their patient population was justice-involved (22 percent) or 51 - 75 percent (8.8 percent).

When asked, “What is the biggest gap in mental health and/or substance use treatment in the area you serve?” the Department received a wide variety of responses. Issues impacting social determinants of health, as well as clinical services were the most commonly cited gap in the treatment system. Roughly 25 percent of providers noted housing (13 percent) or transportation (12 percent) were lacking in the area they serve. With regards to clinical services, the most frequently cited gaps in care were psychiatric services (12 percent); a lack of prescribers (10 percent), whether for psychiatric medications or medication assisted treatment such as buprenorphine; and children’s services (10 percent). An additional 10 percent noted a lack of provider choice/provider shortages in general.

VI. Specific Impact on Enrollees Who Require Treatment for Chronic Conditions and SUD and/or Mental Health Illness

As noted above, the Department is engaged in a variety of initiatives designed to connect Medicaid participants to necessary and appropriate health care. In addition to encouraging the adoption of Screening, Brief Intervention, and Referral to Treatment (SBIRT) Services by primary care providers, the Department is also piloting the Chronic Health Homes Program, which focuses specifically on individuals with behavioral health conditions who are at risk for additional chronic conditions. This section addresses preliminary findings from the Health Homes program and plans for ongoing evaluation, as well as some measures designed to assess how behavioral health integration has impacted how individuals with certain chronic conditions access care.

The Chronic Health Homes Program

The Department is engaged in a variety of initiatives designed to connect Medicaid participants to necessary and appropriate health care. The Chronic Health Homes Program focuses specifically on individuals with certain behavioral health conditions who are at risk for additional chronic conditions. The Affordable Care Act (ACA) created the option for state Medicaid programs to establish Health Homes.²⁴ In response, the Department began the Chronic Health Home Initiative in October 2013 as a five-year demonstration. Chronic Health Homes are intended to improve health outcomes for individuals with chronic conditions by providing patients with an enhanced level of care management and care coordination while also reducing costs. Health Homes provide an integrated model of care that coordinates primary, acute, behavioral health, and long-term

²⁴ ACA § 2703(a) (42 USC § 1396w-4(a)).

services and supports for Medicaid participants who have: two or more chronic conditions, one chronic condition and a risk for developing a second chronic condition, or a serious and persistent mental illness (SPMI).

The Maryland Chronic Health Homes Program builds on Statewide efforts to integrate somatic and behavioral health services, with the aim of improving health outcomes and reducing avoidable hospital utilization. The program targets populations with behavioral health needs who are at high risk for additional chronic conditions, offering them enhanced care coordination and support services from providers from whom they regularly receive care. The program is focused on Medicaid participants with a serious and persistent mental illness (SPMI), an opioid SUD and risk of additional chronic conditions due to tobacco, alcohol, or other non-opioid substance use, and children with serious emotional disturbance (SED). In the Chronic Health Home, the center of a patient's care, instead of being in a somatic care setting, is in a mobile treatment service (MTS), psychiatric rehabilitation program (PRP), or opioid treatment program (OTP). This service delivery method is intended to include nurses and somatic care consultants into these programs and to make sure individuals in MTSs, PRPs, and OTPs receive improved somatic care.

Chronic Health Home providers are eligible for a \$100.85 monthly rate per participant for each month in which an enrollee receives at least two qualified health home services. Health home services include care coordination, care management, health promotion, and referrals to community and social support services. The State received a 90 percent enhanced Federal Medical Assistance Percentage (FMAP) for the provision of health home services during the first eight quarters of the program. As of September 2016, payments to Health Home providers total approximately \$10,187,159. Since the inception of the program, more than 7,000 participants have received services from more than 80 Health Home providers across the State of Maryland.

Evaluation of the Chronic Health Home Program is ongoing and the Department submitted an initial report to the General Assembly in December 2015.²⁵ The results of this preliminary analysis suggest that Health Home participants had a strong demand for the Health Home social services, such as care coordination and health promotion. When comparing the study group and a comparison group of Medicaid participants with similar characteristics, preliminary results show mixed results in the overall trends for the health care utilization and outcomes measures for each group. For example, the Health Home study group had larger increases in rates of ambulatory care between CY 2013 and CY 2014 than the comparison group did. Additionally, although the comparison group's overall utilization of services was often higher than that of the study group, the comparison group experienced more decreases in inpatient stays, ED visits, 30-day all-cause hospital readmissions, and avoidable ED visits. Finally, despite a higher overall rate of inpatient admissions, the average length of stay for those hospitalized was lower for the study group than the comparison group in both years. Evaluation of the second year of the program is underway and will be complete in early 2017.

²⁵ For more information, please see the *2015 Joint Chairmen's Report (p. 88): Report on Health Homes*, <https://mmcp.dhmdh.maryland.gov/SiteAssets/SitePages/Health%20Home%20Program%20Evaluation%20and%20Outcomes/2015%20Joint%20Chairmens%20Report-%20Report%20on%20Patient%20Outcomes%20for%20Participants%20in%20Health%20Homes.pdf>.

Impact of Behavioral Health Integration on Enrollees with Chronic Conditions

Diagnosis with a serious MH condition, a SUD, or both, is associated with a higher risk of mortality and the life expectancy of individuals with a behavioral health diagnosis may be reduced as much as 10 to 20 year as compared with their contemporaries.²⁶ Exacerbating the risk, many individuals with a MH diagnosis, a SUD, or both, also have significant chronic health conditions. MCOs have cited challenge in managing individuals with somatic issues that are driven by behavioral health disorders, including the inability to use SUD providers to assist in the provision and coordination of somatic care. This section looks at the impact of behavioral health integration on individuals with three chronic conditions--diabetes, HIV, and Hepatitis C.

Diabetes

The prevalence of diabetes among adults aged 18 years and older has increased steadily from 3.5 percent in 1980 to 9.0 percent in 2011, with an estimated 29.1 million Americans currently with diabetes.²⁷ Health care costs for diabetic individuals can be as much as 2.3 times higher than the cost of care for non-diabetic individuals.²⁸ Individuals with diabetes also face a heightened risk of behavioral health conditions.²⁹ Diabetic patients are 60 percent more likely to have depressive and anxiety disorders than non-diabetic patients.³⁰ Studies have also found similar correlations for other behavioral health conditions, such as schizophrenia, psychosis, SUDs, and tobacco use.³¹ Additionally, individuals diagnosed with diabetes and SUDs are also more likely to be diagnosed with MHDs, indicating the existence of multi-level comorbidity.³²

The association between diabetes and behavioral health conditions is multi-factorial in nature. Diabetes can cause behavioral health problems because diabetic patients are prone to making poor lifestyle choices and enduring diabetes-related stress can lead to behavioral health issues.³³ Conversely, SUDs and mental health conditions can compromise patients' adherence to diabetes treatment, which in turn, aggravates patients' overall health.³⁴ Taken together, diabetic individuals

²⁶ Chesney, Edward, et al.. Risks of All-Cause and Suicide Mortality in Mental Disorders: A Meta-Review. *World Psychiatry*, June 2014. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4102288/>.

²⁷ Li-Tzy Wu et al., "Substance Use and Mental Diagnoses among Adults with and without Type 2 Diabetes: Results from Electronic Health Records Data," *Drug and Alcohol Dependence* 156 (2015): , doi:10.1016/j.drugalcdep.2015.09.003.

²⁸ Ibid.

²⁹ Ibid.

³⁰ Aaron Pinkhasov et al., "Protocol for Psychopharmacologic Management of Behavioral Health Comorbidity in Adult Patients with Diabetes and Soft Tissue Infections in a Tertiary Care Hospital Setting," *Advances in Skin & Wound Care* 29, no. 11 (2016): , doi:10.1097/01.asw.0000499601.57987.48.

³¹ Li-Tzy Wu et al., "Substance Use and Mental Diagnoses among Adults with and without Type 2 Diabetes: Results from Electronic Health Records Data," *Drug and Alcohol Dependence* 156 (2015): , doi:10.1016/j.drugalcdep.2015.09.003.

³² Ibid.

³³ Ibid.

³⁴ Ibid.

with behavioral health diagnoses are more likely to face premature mortality and place heavy financial burdens on the health care system.³⁵

Table 32 displays the number and percentage of FFS and HealthChoice Medicaid enrollees with a diagnosis of diabetes who had an HbA1c test by behavioral health status. A diagnosis of diabetes was defined based on the Healthcare Effectiveness Data and Information Set (HEDIS) value sets assigned to the Comprehensive Diabetes Care measure. These value sets identify utilization associated with a diagnosis of diabetes. The criteria used to identify enrollees with diabetes included any of the following during the calendar year (CY): At least one prescription for insulin or hypoglycemics/anti-hyperglycemics that was dispensed in an ambulatory setting, or an outpatient, emergency department (ED) and/or inpatient visit, with a diabetes diagnosis.ⁱ Pharmacy claims and encounters were used to identify prescriptions for insulin or hypoglycemics/anti-hyperglycemics using national drug codes (NDCs). Fee for service (FFS) claims and managed care organization (MCO) encounters from Maryland's Medicaid Management Information System (MMIS2) institutional and professional files were reviewed to identify visits completed in an inpatient, outpatient or ambulatory care setting. Participants with diabetes who had at least one glycosylated hemoglobin (HbA1c) test during the CY were also identified. The procedure codes used to locate HbA1c claims and encounters were also derived from the HEDIS measure for Comprehensive Diabetes Care.³⁶

Between CY 2013 to CY 2015, the percentage of enrollees with a diagnosis of diabetes increased for the overall Medicaid population and for each of the subgroups. Among those enrollees with diabetes, the percentage with SUD or co-occurring SUD/MH who had at least one HbA1c test increased in 2014 but declined somewhat in 2015. Other groups had a steady increase in receiving HbA1c testing between CY 2013 and CY 2015.

³⁵ Ibid.

³⁶ The common procedure terminology (CPT) codes can be found in the HEDIS HbA1c Value Set.

Table 32. Medicaid Enrollees with a Diagnosis of Diabetes who had an HbA1c Test by Behavioral Health Status, CY 2013 - CY 2015

Behavioral Health Status	CY 2013					
	Total Enrollees	Enrollees without Diabetes	Enrollees with Diabetes		Enrollees with Diabetes with HbA1c Test	
			#	%	#	%
MHD only	141,317	128,035	13,282	9.4%	6,848	51.6%
SUD only	33,688	32,197	1,491	4.4%	825	55.3%
Co-Occurring MHD and SUD	21,053	19,419	1,634	7.8%	994	60.8%
Neither MHD nor SUD	1,083,341	1,038,584	44,757	4.1%	21,234	47.4%
TOTAL	1,279,399	1,218,235	61,164	4.8%	29,901	48.9%
Behavioral Health Status	CY 2014					
	Total Enrollees	Enrollees without Diabetes	Enrollees with Diabetes		Enrollees with Diabetes with HbA1c Test	
			#	%	#	%
MHD only	159,607	142,827	16,780	10.5%	9,389	56.0%
SUD only	36,936	34,449	2,487	6.7%	1,660	66.7%
Co-Occurring MHD and SUD	25,852	23,400	2,452	9.5%	1,681	68.6%
Neither MHD nor SUD	1,284,756	1,219,563	65,193	5.1%	36,479	56.0%
TOTAL	1,507,151	1,420,239	86,912	5.8%	49,209	56.6%
Behavioral Health Status	CY 2015					
	Total Enrollees	Enrollees without Diabetes	Enrollees with Diabetes		Enrollees with Diabetes with HbA1c Test	
			#	%	#	%
MHD only	175,900	157,409	18,491	10.5%	10,433	56.5%
SUD only	37,191	34,626	2,565	6.9%	1,681	65.5%
Co-Occurring MHD and SUD	28,761	26,055	2,706	9.4%	1,826	67.5%
Neither MHD nor SUD	1,328,006	1,258,808	69,198	5.2%	39,578	57.2%
TOTAL	1,569,858	1,476,898	92,960	5.9%	53,528	57.6%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

HIV/AIDS

In 2013, Maryland ranked seventh among the 50 states in the number of HIV diagnoses.³⁷ As of April 2016, 9,041 Maryland Medicaid recipients are living with HIV or AIDS. Almost 6,800 of these individuals live in the Baltimore Metropolitan area. HIV and AIDS both are associated with complex treatment plans as well as significant social stigma. Those with HIV and a MH condition or SUD are more likely to have more rapidly progressing and harder to treat HIV, lower rates of adherence to

³⁷ Statistics Overview – HIV/AIDS. Center for Disease Control and Prevention, March 2016.
<http://www.cdc.gov/hiv/statistics/overview/>.

medication and treatment, increased engagement in risky behavior, and increased suicide risk.³⁸ In addition, HIV can cause behavioral health conditions, such as depression, and is associated with mild to severe cognitive changes, such as dementia.³⁹ Research studies have shown association between HIV infection and severe mental health disorders; the prevalence of HIV among those with a serious mental illness ranges from one to 24 percent.⁴⁰ People with HIV are twice as likely to have depression compared to those without HIV.⁴¹

The Department continuously monitors service utilization for Medicaid participants with HIV/AIDS. This section of the report presents the enrollment distribution of all Medicaid participants and HealthChoice participants with HIV/AIDS by behavioral health classification, CD4 testing, and viral load testing. CD4 testing is used to determine how well the immune system is functioning in individuals diagnosed with HIV. The viral load test monitors the progression of the HIV infection by measuring the level of immunodeficiency virus in the blood. ICD-9 and ICD-10 Codes were used to identify participants with HIV/AIDS. HIV/AIDS diagnoses were also identified using nine MCO capitation rate cell flags for HIV.

Tables 33 through 36 show the distribution of recipients having HIV who had CD4 and viral load testing over the study period. In every year, participants with a Behavioral Health Condition had a higher rate of CD4 and Viral Load testing than those with no behavioral health condition. Use of CD4 and Viral Load testing was higher in HealthChoice than among all persons in Medicaid with HIV.

Table 33. Use of CD4 Tests and Behavioral Health Disorders Among All in Medicaid with HIV

Behavioral Health Status	CY 2013			CY 2014			CY 2015		
	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test
Only MHD	1,878	1,042	55.5%	2,120	1,245	58.7%	2,404	1,425	59.3%
Only SUD	1,254	800	63.8%	1,362	927	68.1%	1,280	841	65.7%
Both MHD and SUD	1,023	637	62.3%	1,148	789	68.7%	1,164	798	68.6%
No MHD or SUD	6,452	3,378	52.4%	8,168	4,660	57.1%	8,326	4,761	57.2%
TOTAL	10,607	5,857	55.2%	12,798	7,621	59.5%	13,174	7,825	59.4%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

³⁸ Moore, David J. and Carolina Posada. HIV and psychiatric comorbidities: What do we know and what can we do?. Psychology and AIDS Exchange Newsletter, January 2013.

<http://www.apa.org/pi/aids/resources/exchange/2013/01/comorbidities.aspx>.

³⁹ HIV/AIDS and Mental Health. National Institute of Mental Health, November 2016.

<https://www.nimh.nih.gov/health/topics/hiv-aids/index.shtml>.

⁴⁰ De Hert, N., et al.. Physical illness in patients with severe mental disorders. II. Barriers to care, monitoring and treatment guidelines, plus recommendations at the system and individual level. World Psychiatry, 10, 138-51.

Source: <http://www.ncbi.nlm.nih.gov/pubmed/21633691>.

⁴¹ HIV/AIDS and Mental Health.

Table 34. Use of Viral Load Tests and Behavioral Health Disorders Among All in Medicaid with HIV

Behavioral Health Status	CY 2013			CY 2014			CY 2015		
	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test
Only MHD	1,878	1,002	53.4%	2,120	1,182	55.8%	2,404	1,398	58.2%
Only SUD	1,254	770	61.4%	1,362	877	64.4%	1,280	798	62.3%
Both MHD and SUD	1,023	609	59.5%	1,148	738	64.3%	1,164	735	63.1%
No MHD or SUD	6,452	3,294	51.1%	8,168	4,600	56.3%	8,326	4,661	56.0%
TOTAL	10,607	5,675	53.5%	12,798	7,397	57.8%	13,174	7,592	57.6%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 35. Use of CD4 Tests and Behavioral Health Disorders among Persons in HealthChoice with HIV

Behavioral Health Status	CY 2013			CY 2014			CY 2015		
	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test	Total with HIV	Persons with HIV having CD4 test	Percent with a CD4 Test
Only MHD	969	682	70.4%	1,443	1,032	71.5%	1,618	1,209	74.7%
Only SUD	799	575	72.0%	1,116	821	73.6%	1,054	743	70.5%
Both MHD and SUD	710	508	71.5%	985	731	74.2%	978	734	75.1%
No MHD or SUD	3,458	2,149	62.1%	6,072	4,026	66.3%	6,275	4,237	67.5%
TOTAL	5,936	3,914	65.9%	9,616	6,610	68.7%	9,925	6,923	69.8%

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 36. Use of Viral Load Tests and Behavioral Health Disorders among Persons in HealthChoice having HIV

Behavioral Health Status	CY 2013			CY 2014			CY 2015		
	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test	Total with HIV	Persons with HIV having Viral Load test	Percent with a Viral Load Test
Only MHD	969	646	66.7%	1,443	954	66.1%	1,618	1,134	70.1%
Only SUD	799	540	67.6%	1,116	761	68.2%	1,054	695	65.9%
Both MHD and SUD	710	475	66.9%	985	672	68.2%	978	664	67.9%
No MHD or SUD	3,458	2,108	61.0%	6,072	3,904	64.3%	6,275	4,018	64.0%
TOTAL	5,936	3,769	63.5%	9,616	6,291	65.4%	9,925	6,511	65.6%

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

Hepatitis C

Hepatitis C is a blood-borne virus that causes liver disease and is the most common form of viral hepatitis in the United States.⁴² While the virus clears in 15 to 25 percent of cases, the remaining 75 to 85 percent of cases develop into chronic hepatitis. In the United States, between 2.7 and 3.9 million people have Hepatitis C.⁴³ In Maryland, hepatitis C rates increased by 125 percent between 2009 and 2013.⁴⁴

Because the virus is frequently transmitted through needles, studies have estimated that between 40 and 70 percent of injectable drug users have some form of Hepatitis C.⁴⁵ Additionally, up to 30 percent of hepatitis C patients have a diagnosis of depression.⁴⁶ Hepatitis C treatment is also associated with mental health side effects. One drug frequently used to treat hepatitis C, interferon alfa – 2b, can lead to depression, suicidal ideation, irritability and short temper, and agitation and paranoia.⁴⁷

Prescription drug coverage is a key component of the Maryland Medicaid benefits package, although coverage is an optional benefit. As part of the Medicaid benefits package, the Department has elected to cover the new class of hepatitis C medications, such as Sovaldi and Harvoni, which

⁴² Hepatitis C Screening in the Behavioral Healthcare Setting. Substance Abuse and Mental Health Services Administration, Fall 2015. <http://store.samhsa.gov/shin/content//SMA15-4917/SMA15-4917.pdf>.

⁴³ Hepatitis C FAQs for Health Professionals. Center for Disease Control and Prevention, July 2016. <http://www.cdc.gov/hepatitis/hcv/hcvfaq.htm>.

⁴⁴ Maryland – 2015 State Health Profile. Center for Disease Control and Prevention. http://www.cdc.gov/nchstp/stateprofiles/pdf/maryland_profile.pdf.

⁴⁵ Smith, B. D., Jorgensen, C., Zibbell, J. E., & Beckett, G. A. (2012). Centers for Disease Control and Prevention initiatives to prevent hepatitis C virus infection: A selective update. *Clinical Infectious Diseases*, 55(Suppl. 1), S49–S53.

⁴⁶ FYI Hepatitis C – A Medical and Psychiatric Disorder. New York State Office of Alcoholism and Substance Abuse Services. <https://www.oasas.ny.gov/admed/fyi/FYIInDepth-HepC.cfm>.

⁴⁷ Ibid.

have the potential to cure the disease. The cost of these medications is significant and is included in the calculations discussed in this report. To ensure the new coverage does not disproportionately impact MCO capitation rates, the Department instituted a “kick payment” to the MCOs designed to offset the increased cost associated with providing the medication to participants. The hepatitis C kick payment experience is shown in Table 37.

Table 37. Hepatitis C Kick Payment Expenditures, CY14-CY15

Calendar Year	Total Number of Prescriptions	Total Kick Payment Amount
CY 2014	1,221	\$41,584,129.31
CY 2015	3,969	\$131,886,261.66

***Please consider CY 2015 data as preliminary, as there is insufficient claims run out**

VII. Evaluation of the ASO

On January 1, 2015, ValueOptions, now Beacon Health Options, became the Department’s ASO for integrated SUD and specialty MH services. The ASO is responsible for one comprehensive system that administers claims, billing, authorization, and referral services for individuals seeking behavioral health care. Historically, the Mental Hygiene Administration monitored the ASO contract, which only managed specialty mental health services. However since 2015, the ASO contract has been monitored jointly by Maryland Medicaid and BHA, for both specialty mental health and substance use services. The Department has conducted an evaluation of the ASO’s first year of performance. The evaluation requires a collaborative relationship between the Department and the ASO in order to effectively manage the Public Behavioral Health System (PBHS) services. Extensive work was performed in 2014 to update policy, and streamline authorization and reimbursement processes to effectively manage both Medicaid and the State’s dollars. The discussion below focuses on the evolution of the ASO contract, compares performance by the ASO on performance metrics common to the old and current contract, provides an update on the current status of behavioral health data-sharing between the ASO and MCOs, and considers outstanding concerns. While the ASO’s performance was largely successful in 2015, challenges existed in the implementation of performance-based standards.

ASO Performance Before and After Behavioral Health Integration

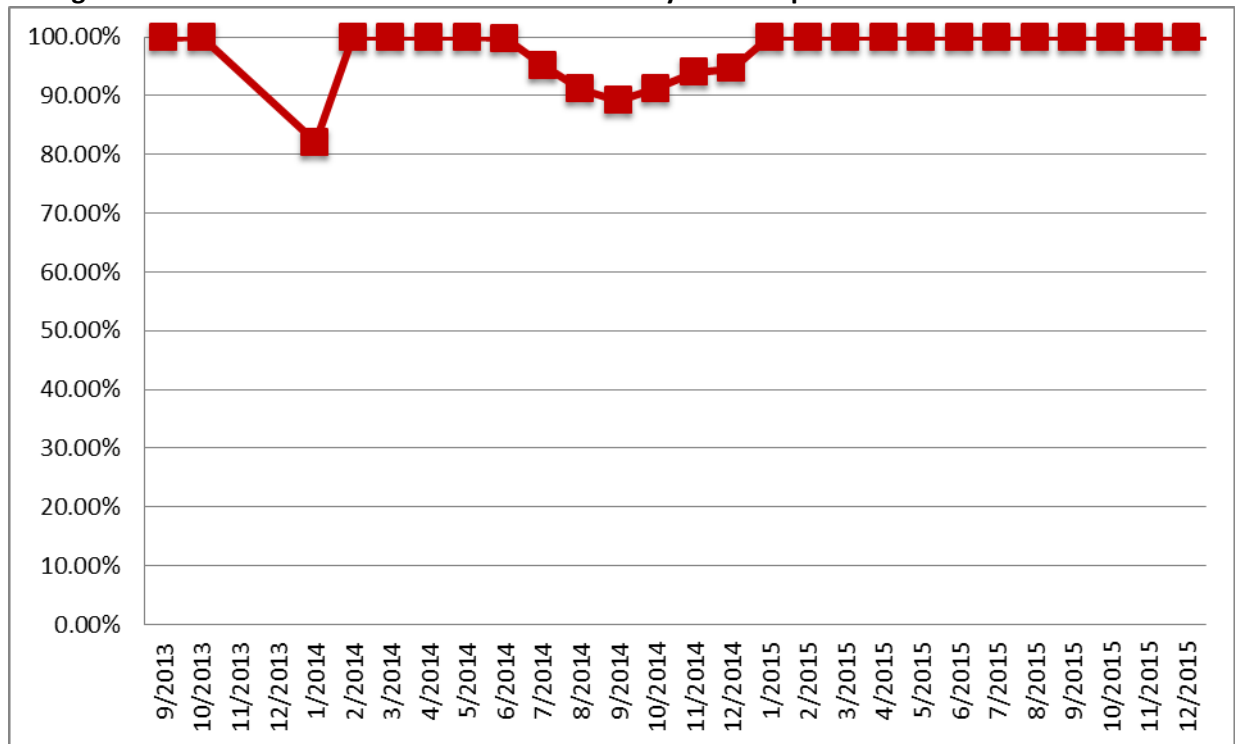
The launch of the behavioral health integration presented the Department with the opportunity to revisit and revise the core elements of the existing ASO contract. As a result, the Department has incorporated new provisions designed to enhance oversight and monitoring with the goal of improving the ASO performance. The new contract includes several enhancements, such as additional performance metrics and deliverables designed to result in more consistent outcomes. Performance metrics common to both the previous and current contract include staffing, claims processing, customer service, and information technology. Performance metrics specific to the current contract include provider recruitment and tracking of compliance activities

Comparing ASO performance under the old contract to the new contract, available information suggests that performance has improved in several areas compared to historical outcomes. Between September 2013 and December of 2014, the ASO was understaffed four out of the 16 (25

percent) months. However, current records show that the ASO maintained staffing levels at or above 90 percent throughout CY 2015.

Both the old and new contracts require the ASO to pay 100 percent of “clean” electronic claims within 14 days. Figure 5 shows that between September 2013 and December of 2014, the ASO did not meet this goal in 15 of the 16 months measured. In two of the months, processing rates were below 90 percent. However, records indicate that the ASO successfully processed 100 percent of clean electronic claims within 14 days throughout CY 2015. A clean claim is one that meets all necessary criteria, such as provider eligibility, participant eligibility, correct dates of service, correct coding, and does not require additional review or re-submission.

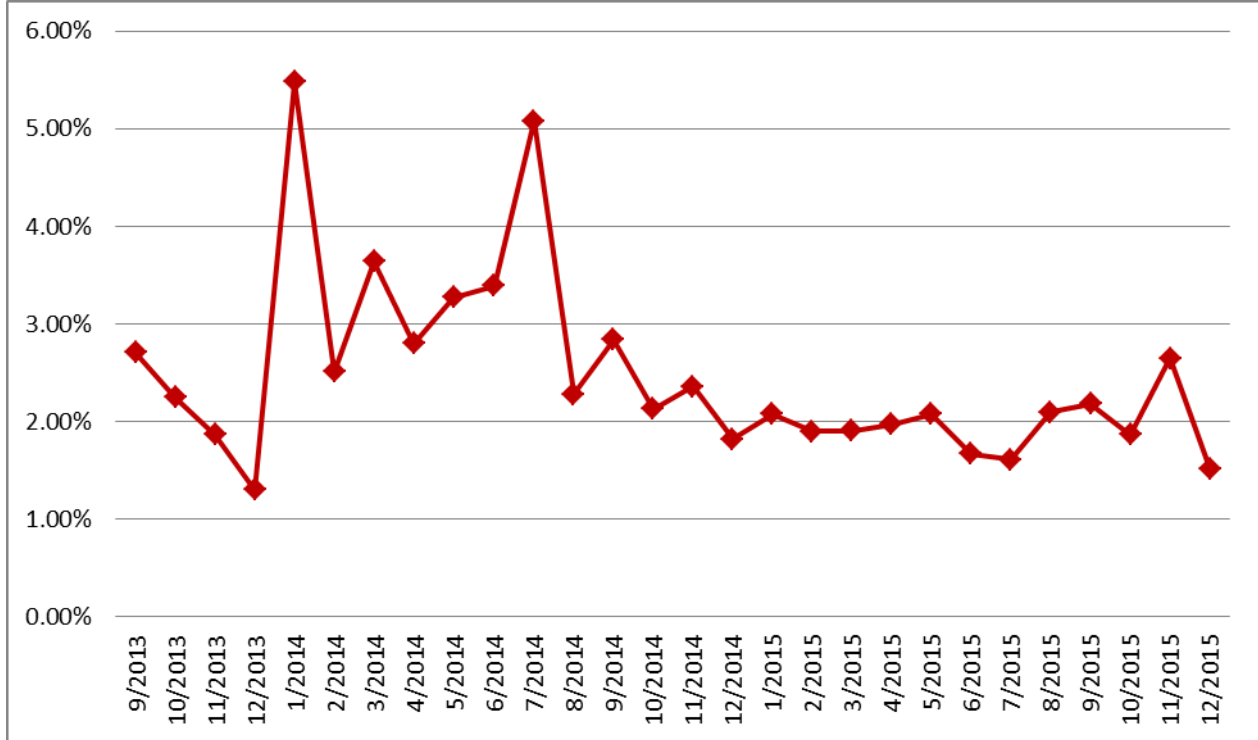
Figure 5. Clean Electronic Claims Paid within 14 Days from September 2013 to December 2015



Note: Target was 100 percent

The customer service performance metrics in both the old and new contracts include measures assessing call abandonment and wait times. As shown in Figure 6, between September 2013 and December 2014, the abandoned call rate goal was missed five times. Records show that the abandoned call rate has been consistently been lower than the goal of three percent from January to December 2015. Further records indicate that the ASO overall performed higher than the goal, of a wait time of less than two minutes, that was in place for the previous contract except for during the contract transition period when the call volume for SUD exceeded expectations as providers adjusted to the new system.

Figure 6. Abandoned Call Rate from September 2013 to December 2015



Note: Target was less than 3 percent.

One information technology performance metric assesses unscheduled down time. Over the sixteen month period from September 2013 to December 2014, there was less than seven hours of unscheduled down time. During CY 2015, there was also no unscheduled downtime.

Another example of improved accountability for the ASO, if specific performance metrics were missed, financial penalties may be incurred. The ASO has not incurred any financial penalties due to failure to meet its target goals in contract year one.

A key feature common to both the prior contract and the current contract is a provision permitting the Department to issue a request for a Root Cause Analysis (RCA, which provides an initial impact assessment of the performance issue. If the impact is found to be severe enough, the Department may request a Corrective Action Plan (CAP) to address any vendor performance issues. The CAP must include background information; a problem statement; findings and root cause descriptions; corrective actions and implementation dates; and a chart detailing the correction, level of urgency, timeline, damage assessment, and estimated cost per day. The RCA/CAP must be delivered within three business days of the request. Since the implementation of the new contract, the Department has requested two CAPs from the ASO. The Department requested a CAP for information technology in March 2015 and for compliance in October 2015. Both CAPs were successfully resolved by the ASO.

Current Status of Behavioral Health Data-Sharing

The use and disclosure of protected health information (PHI) is governed, generally, by the Health Insurance Portability and Accountability Act (HIPAA). Under HIPAA, PHI may be disclosed for purposes of treatment, payment and health care operations without patient consent. However, in nearly all cases, the disclosure of drug and alcohol abuse (SUD) treatment and prevention records is subject to the more restrictive and stringent standard of 42 C.F.R. Part 2 (“Part 2”), which prohibits the disclosure of PHI absent specific authorization from the patient.

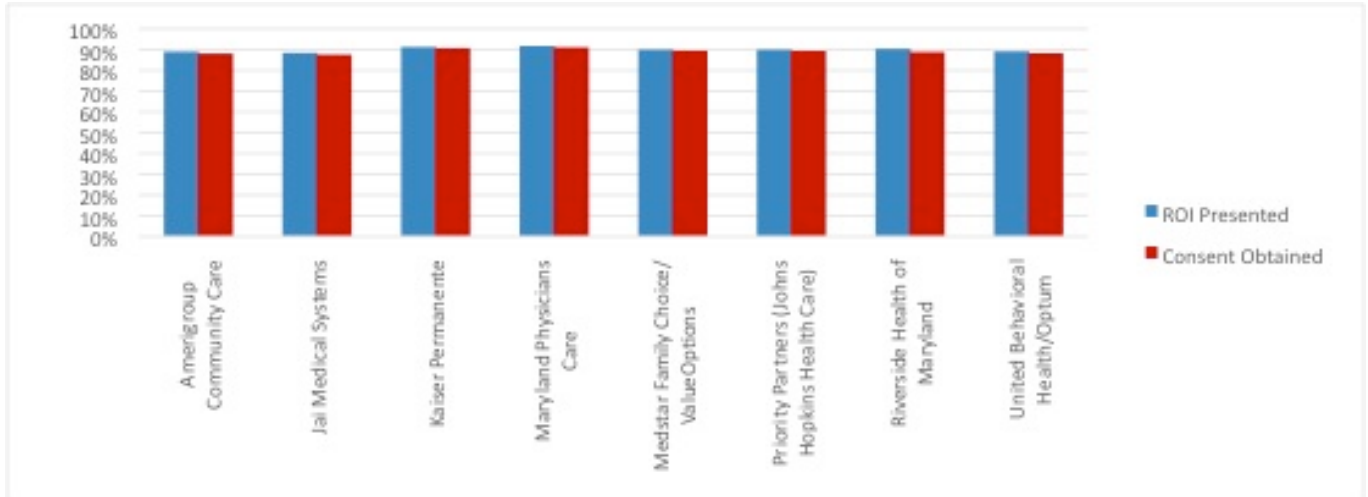
Specifically, Part 2 applies to federally-assisted programs that hold themselves out as providing, and do provide, alcohol or drug abuse treatment, diagnosis or referral for treatment. Part 2 protects the disclosure of any information that “would identify a patient as an alcohol or drug abuser either directly, by reference to other publicly available information, or through verification of such an identification by another person.” Express patient consent is required before records can be disclosed, subject to a few limited exceptions, and patient records cannot be re-disclosed to third parties. Exceptions to the consent requirement include disclosure to medical personnel in the event of a bona fide medical emergency, for the purposes of scientific research or audit, pursuant to a court order, for purposes of child abuse and neglect investigations or pursuant to a Qualified Services Organization Agreement (QSOA). In addition, Part 2 restrictions do not apply to communications between a program and an entity with direct administrative control over that program. Information disclosed under one of these exceptions may not be re-disclosed without express patient consent.

Prior to the implementation of the carve-out, as the payers of SUD claims, Medicaid MCOs had limited access to data otherwise protected by Part 2. However, an MCO’s ability to re-disclose this information to a patient’s somatic care providers or for care coordination purposes was still subject to Part 2’s guidelines and thus required express consent from the patient. As the carve-out implementation date of January 1, 2015, this issue was identified as problematic both in the existing manner that data had been handled and the need to develop a system to address this barrier to clinically necessary care coordination. The Department worked extensively with the Office of the Attorney General and with Beacon’s national experts to develop a new process to obtain release of information (ROI) forms from Medicaid beneficiaries accessing SUD services.

The ASO and the MCOs have worked collaboratively with SUD providers toward a goal of obtaining a signed consent form from every SUD services recipient willing to provide consent. All SUD programs and providers—as well as mental health providers delivering SUD services to Maryland Medicaid members—have been instructed to request an ROI form prior to the provision of SUD services. Completed forms allow the ASO to release authorization and claims data to the participant’s MCO—along with additional providers specified by the patient—and thereby coordinate care across the continuum of care. The consent form is required to be updated by the patient annually.

As shown in Figure 7, efforts to obtain consents to share this information have largely been successful. Since the implementation of behavioral health integration, 88 to 91 percent of participants in each MCO have consented to sharing their information.

Figure 7. Counts of member ROI dispositions by MCO, cumulative through September 2016



Due to the restrictive nature of Part 2, issues still persist around information sharing. For instance, when consent is not obtained, MCOs are unaware that one of their participants is in SUD treatment. The inability to track when a participant is in treatment for an opioid use disorder, and concurrently receiving opioids, benzodiazepines, or other drugs, can lead to dangerous prescription combinations. In such a scenario, MCOs are unable to effectively manage the situation. When consent is obtained, MCOs have commented that SUD data is not received in real time. Difficulties merging data from Beacon Health Options, with MCO patient data has also been cited as a challenge.

Outstanding Challenges

The Department implemented three significant changes from the former contract effective January 1, 2015: 1) The management of the Medicaid portion of the ASO contract transferred to Medicaid; 2) Substance use services were included in the ASO contract, and 3) MHA merged with ADAA forming the BHA which provides management of the Public Behavioral Health provider network and service management. Challenges surrounding the implementation of performance-based standards is discussed below.

HEDIS:

One overarching goal of the behavioral health integration effort was to implement performance-based standards for the ASO. The current contract with the ASO includes outcome-based standards based on six key HEDIS measures:

- Antidepressant Medication Management (AMM)
- Follow-up Care for Children Prescribed ADHD Medication (ADD)

- Adherence to Antipsychotic Medications for Individuals with Schizophrenia (SAA)
- Mental Health Utilization (MPT)
- Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)
- Plan All-Cause Readmissions (PCR)

The ASO was unable to meet the required HEDIS deliverables, as the ASO did not have access to the necessary somatic data. In its initial RFP response and a June 2015 letter to the Department, the ASO indicated that “To accurately report on new HEDIS measures, [Beacon] will require access to all Medicaid claims data including medical, behavioral health, and pharmacy. We will work with DHMH and the Maryland-based MCOs to develop the proper linkages to receive this data in a timely manner.” Specifically, Beacon indicated it was not comfortable working with a more limited data set provided directly by the Department. Absent the ability to access this data, Beacon recommended waiving the liquidated damages associated with the performance measures. Beacon has submitted one metric that they have been able to produce without further data from the Department. The ASO is awaiting further guidance from the Department on its request for a waiver of the liquidated damages provision. The Department is also considering possible alternative metrics that can be calculated using only the behavioral health data Beacon has access to in order to assess the ASO’s performance.

VIII. Costs Associated with Carve-Out

This section includes an analysis of the total cost of behavioral health services in the Medicaid program in the years prior to and after the behavioral health carve-out. Separately, and for each calendar year (2013-15), Maryland Medicaid FFS claims in the MMIS2 were used to identify participants with any diagnostic evidence of a MHD or SUD.

Capitation and FFS payment information were summarized for each person. Capitation summaries included regular monthly payments made by DHMH to a members’ MCO, and “kick” payments made to MCOs for births and hepatitis C treatments. Managed care (“HealthChoice”) participants were identified so as to enable reports for that majority sub-population of enrollees.

Results

Tables 38 through 40 summarize total and average costs by behavioral health diagnosis category for CYs 2013 through 2015. Each table shows the number of participants who used a behavioral health service, the total costs for those participants (FFS and capitation payments), and the average costs for those participants. For the entire Medicaid population with a behavioral health diagnosis, the average costs increased from \$13,970 per person in CY 2013 to \$15,102 in CY 2014 to \$15,602 in CY 2015. Increases for the HealthChoice population were less marked, increasing from \$12,881 in CY 2013 to \$13,146 in CY 2015. Among HealthChoice participants, those with co-occurring MHD and SUD had much higher average costs than those with an MHD or SUD only across all three years.

Table 38. Total and Average Costs for All Medicaid and HealthChoice Participants with a Behavioral Health Diagnosis, by Diagnosis Category, CY 2013

	Expenditures for All Medicaid Participants Includes FFS Payments, MCO, and PAC Capitation Payments			Expenditures for HealthChoice Participants* Includes FFS Payments and MCO Capitation Payments		
	Users	Cost	Average Cost	Users	Cost	Average Cost
Behavioral Health Diagnosis						
MHD Only	141,300	\$2,177,616,453	\$15,411	100,812	\$1,293,698,848	\$12,833
SUD Only	33,677	\$249,310,206	\$7,403	19,625	\$176,675,676	\$9,003
Both MHD and SUD	21,053	\$311,560,108	\$14,799	12,796	\$245,841,904	\$19,212
Total	196,030	\$2,738,486,767	\$13,970	133,233	\$1,716,216,428	\$12,881

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 39. Total and Average Costs for All Medicaid and HealthChoice Participants with a Behavioral Health Diagnosis, by Diagnosis Category, CY 2014

	Expenditures for All Medicaid Participants Includes FFS Payments and MCO Capitation Payments			Expenditures for HealthChoice Participants Includes FFS Payments and MCO Capitation Payments		
	Users	Cost	Average Cost	Users	Cost	Average Cost
Behavioral Health Diagnosis						
MHD Only	159,587	2,586,194,073	16,206	130,234	1,711,029,384	13,138
SUD Only	36,929	339,757,920	9,200	34,435	306,267,228	8,894
Both MHD and SUD	25,852	432,318,801	16,723	23,911	399,158,923	16,694
Total	222,368	3,358,270,794	15,102	188,580	2,416,455,536	12,814

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

Table 40. Total and Average Costs for All Medicaid and HealthChoice Participants with a Behavioral Health Diagnosis, by Diagnosis Category, CY 2015

	Expenditures for All Medicaid Participants Includes FFS Payments and MCO Capitation Payments			Expenditures for HealthChoice Participants Includes FFS Payments and MCO Capitation Payments		
	Users	Cost	Average Cost	Users	Cost	Average Cost
Behavioral Health Diagnosis						
MHD Only	175,878	2,791,298,701	15,871	143,879	1,781,468,841	12,382
SUD Only	37,186	413,648,832	11,124	33,885	372,662,354	10,998
Both MHD and SUD	28,761	568,123,166	19,753	26,246	527,761,410	20,108
Total	241,825	3,773,070,699	15,602	204,010	2,681,892,605	13,146

*Please consider CY 2015 data as preliminary, as there is insufficient claims run out

IX. Recommendations and Conclusion

Key goals of the behavioral health integration effort included the merger of the MHA and the ADAA into the BHA, the implementation of a performance-based carve-out of MH and SUD services, and the development of a seamless service delivery system that permits enhanced care coordination and information exchange designed to improve health outcomes while reducing unnecessary care utilization and lowering costs. While the first initiative was a success, following challenges in the first year of the carve-out, there are opportunities to continue to improve in the latter two areas.

Although data for CY 2015 are not yet final, preliminary findings suggest that the carve-out of SUD services and integration of benefits under the ASO have not yet significantly impacted the utilization of high-cost services. Across all three study years – two years when SUD services were in the MCO benefit package and one year when SUD services were carved-out and administered by Beacon Health Options – inpatient and ED utilization and avoidable hospital readmissions remained relatively consistent for individuals with a behavioral health diagnosis. Mitigating factors such as the ACA expansion and related enrollment fluctuations may have influenced results, and it is possible that data from subsequent years will yield stronger results. However, in the absence of a strong downward trend, it is clear that additional opportunities to improve coordination of behavioral health and somatic services remain.

Additionally, the implementation of performance-based standards for the ASO remains a challenge. While efforts to promote data sharing between the ASO and MCOs have largely been successful, in the absence of effective performance standards, the ASO lacks many of the incentives to improve care coordination and reduce care utilization inherent to the MCO delivery model, which is driven by capitation payments. As such, the Department disagrees with Beacon's perspective that the liquidated damages associated with its contractual performance measures should be waived. In lieu of removing this requirement, the Department supports developing performance-based standards based exclusively on data already available to the ASO.

Finally, CMS recently directed Maryland to revisit its efforts to improve the integration of behavioral health and physical health services. As part of the Department's recent § 1115 waiver renewal, CMS is requiring the Department to examine its integration strategy and to commit to an improved approach by January 1, 2018, with the goal of implementing by January 1, 2019. As part of such an effort, further consideration of recent guidance issued by CMS in tandem with the new managed care regulations regarding coverage for IMD services is warranted. Pursuant to this new guidance, states (1) are allowed to cover both specialty MH and SUD short-term IMD services through their managed care networks or (2) may seek authority to cover SUD IMD services, but not specialty MH services, through their § 1115 waiver. Under the current carve-out, Maryland will implement the second option. While the two approaches have restrictions, the relative flexibility provided to states when IMD services are provided through managed care may warrant further consideration.

Given these considerations the Department recommends the following:

1. Implementation of the special terms and conditions in the renewal of the HealthChoice § 1115 waiver and in accordance with these federal requirements, examine the integration of behavioral and physical health services in the State with the goal of implementing new recommendations no later than January 1, 2019;
 2. Continuation of efforts to improve existing efforts and explore new opportunities to effectively coordinate care between behavioral health and physical health providers, including the existing chronic health home model; and
 3. Consideration of performance-based standards for the ASO based exclusively on data available to the ASO and possible incorporation of such standards into the ASO's agreement with the Department.
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