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report

Evaluation of the Maryland Medicaid HealthChoice Program: CY 2014 to CY 2018

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List of Abbreviations

ACA	Affordable Care Act
ACCU	Administrative Care Coordination Unit
ACIP	Advisory Committee on Immunization Practices
ACIS	Assistance in Community Integration Services
AHRQ	U.S. Agency for Healthcare Research and Quality, HHS
AIDS	Acquired immunodeficiency syndrome
ART	Antiretroviral therapy
ASAM	American Society of Addiction Medicine
ASO	Administrative services organization
BHA	Behavioral Health Administration
CD4	A test of the quantity of immune system cells used to diagnose and monitor HIV disease
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CLR	Childhood Lead Registry
CMS	Centers for Medicare & Medicaid Services
COMAR	Code of Maryland Regulations
COPD	Chronic obstructive pulmonary disease
CY	Calendar year
Department	Maryland Department of Health
DBA	Dental benefit administrator
DPP	Diabetes Prevention Program
ED	Emergency department
EID	Employed Individuals with Disabilities
ENT	Ear, nose, and throat
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment
EQRO	External Quality Review Organization
F&C	Families and Children
FFS	Fee-for-service
FOBT	Fecal occult blood test

FPL	Federal poverty level
FQHC	Federally-qualified health center
FY	Fiscal year
HbA1c	Hemoglobin A1c screening
HCBS	Home- and community-based services
HCHD	Harford County Health Department
HEDIS®	Healthcare Effectiveness Data and Information Set®
HHS	U.S. Department of Health and Human Services
HIV	Human immunodeficiency virus
HPV	Human papillomavirus
HVS	Home Visiting Services
ICS	Increased Community Services
IMD	Institution for Mental Disease
IUD/IUS	Intrauterine device or system
LAA	Local access area
LOS	Length of stay
MAGI	Modified adjusted gross income
MAT	Medication-assisted treatment
MCO	Managed care organization
MCHP	Maryland Children's Health Program
MDE	Maryland Department of the Environment
MFR	Managing for Results
MHBE	Maryland Health Benefit Exchange
MHC	Maryland Health Connection
MHD	Mental health disorder
MMA	Medication Management for People with Asthma
NCI	National Cancer Institute
NCQA	National Committee for Quality Assurance
NQF	National Quality Forum
MPC	Maryland Physicians Care
NPI	National Provider Identifier

NYU	New York University
OPA	Office of Population Affairs
Pap	Papanicolaou test for cervical cancer
PAC	Primary Adult Care Program
PCP	Primary care provider
PrEP	Pre-exposure prophylaxis
POS	Plan of service
PQI	Prevention Quality Indicator
QHP	Qualified health plan
REM	Rare and Expensive Case Management
SBIRT	Screening, Brief Intervention, and Referral to Treatment
SPA	State Plan Amendment
SSI	Supplemental Security Income
SUD	Substance use disorder
TANF	Temporary Assistance for Needy Families
VBP	Value-based purchasing

Evaluation of the Maryland Medicaid HealthChoice Program: CY 2014 to CY 2018

Executive Summary

In 1997, Maryland implemented HealthChoice—a statewide mandatory Medicaid and Children's Health Insurance Program (CHIP) managed care program—under authority of a waiver through §1115 of the Social Security Act. The provisions of the Affordable Care Act (ACA) that went into effect in 2014 marked another milestone by extending quality coverage to many more Marylanders with low income by calendar year (CY) 2018. Over 20 years after its launch, HealthChoice covered close to 90 percent of the state's Medicaid and Maryland Children's Health Program (MCHP) populations.[1]

The Hilltop Institute, on behalf of the Maryland Department of Health (the Department), evaluates the program annually; this evaluation covers the period from CY 2014 through CY 2018.

The goal of the HealthChoice §1115 demonstration is to improve the health status of Marylanders with low income by:

- Improving access to health care for the Medicaid population, including special populations
- Improving the quality of health services delivered
- Providing patient-focused, comprehensive, and coordinated care designed to meet health care needs by providing each member a single "medical home" through a primary care provider (PCP)
- Emphasizing health promotion and disease prevention by providing access to immunizations and other wellness services, such as regular prenatal care
- Expanding coverage to additional Marylanders with low income through resources generated by managed care efficiencies

HealthChoice is a mature managed care program that covered nearly one in four Marylanders during CY 2018. Participants choose one of the nine participating managed care organizations (MCOs), along with a PCP from their MCO's network, to oversee their medical care. HealthChoice and fee-for-service (FFS) enrollees receive the same comprehensive benefits. This evaluation provides evidence that HealthChoice has successfully achieved its stated goals of improving coverage and access to care, providing a medical home to participants, and improving the quality of care.

[1] Maryland's Children's Health Insurance Program is known as MCHP.

HealthChoice has demonstrated improvement in providing targeted preventive screenings and ensuring that participants receive care at the appropriate level. Some of these recent successes include increasing the rates of women receiving breast cancer screenings, ambulatory care visits among children in foster care, and childhood immunizations. Among individuals with human immunodeficiency virus or acquired immunodeficiency syndrome (HIV/AIDS), a test for the quantity of immune system cells used to diagnose and monitor HIV/AIDS referred to as viral load testing as well as cluster of differentiation 4 (CD4) testing rates increased, while emergency department (ED) utilization dropped. The percentage of HealthChoice participants aged 19 to 64 years with at least one inpatient hospital admission declined by 1.7 percentage points.

Recent developments both within Maryland and nationally will continue to affect HealthChoice. Primarily, increased enrollment starting in CY 2014 stemming from the ACA's expansion of Medicaid eligibility increased service utilization across the spectrum of somatic and behavioral health services. In addition, the state's chronic health home demonstration seeks to improve health outcomes for individuals with chronic conditions. Other programs—such as the Residential Treatment for Individuals with Substance Use Disorder (SUD) Program and the Evidence-Based Home Visiting Services Pilot program—began in July 2017 and are expected to improve access, reduce costs, and improve quality.

Program improvements are a necessary component to ensure that the growing number of participants have access to quality care. The Department is committed to working with the Centers for Medicare & Medicaid Services (CMS) and other stakeholders to identify and address necessary changes. Some of the areas targeted for improvements include improving diabetes care, reducing racial and ethnic disparities, and increasing rates of colorectal cancer screening.

Coverage and Access

A major goal of the HealthChoice program is to expand coverage to residents with low income and to improve access to health care services for the Medicaid population. HealthChoice has largely succeeded in this area. Overall, program enrollment increased 12.3 percent, from 1,060,052 participants in CY 2014 to 1,191,110 participants in CY 2018.[2]

Enrollment continued to grow during the study period as the expansion of Medicaid eligibility ramped up over the course of 2014 and more residents realized they were eligible for Medicaid during the evaluation period. In 2014, the Department expanded Medicaid eligibility to adults under the age of 65 years with incomes up to 138 percent of the federal poverty level (FPL) per the ACA, which resulted in a large increase in Medicaid enrollment. In January 2014, 139,427 participants gained coverage through this expansion (The Hilltop Institute, 2017). This included more than 90,000 participants switching to full-benefit Medicaid from the former Primary Adult Care (PAC) program. Individuals covered under the ACA expansion included some participants who may have had low health literacy and were previously unaccustomed to accessing care

[2] These totals reflect participants enrolled as of December 31 of each respective year, thus providing a snapshot of typical program enrollment on a given day. Alternatively, the total number of participants with any period of HealthChoice enrollment during the year increased by 11.1 percent between CY 2014 and CY 2018.

through Medicaid, had limited experience in navigating a managed care health system, and were unfamiliar with the Medicaid benefit package. In addition, many ACA expansion participants may not have received services in the past. By December 2018, 298,740 HealthChoice participants were enrolled under the ACA expansion.

The large influx of ACA expansion participants led to changes in overall program access and utilization measures. Participants in this group were less likely to receive any Medicaid services compared to those in other coverage categories. Specifically, 14 percent of the ACA expansion participants did not receive any services, compared to 7.7 percent of those enrolled in previously existing coverage categories for parents and primary caregivers. Expansion participants had a lower rate of ambulatory care visits than the rest of the Medicaid population from CY 2014 through CY 2018. Additional changes occurred in service utilization patterns during the evaluation period, including a large increase in the number of participants who received services for a behavioral health condition.

The addition of new MCOs in CYs 2014 and 2017 also influenced overall program performance due to initial lower service volumes. Nonetheless, trends in service utilization indicate increased health literacy, in alignment with the overall goals of the HealthChoice demonstration program. HealthChoice facilitates access to care by requiring each MCO to have a provider network capacity of one PCP for every 200 participants. This network adequacy analysis counts the number of PCP offices included in provider networks in each county in Maryland. All jurisdictions achieved a 200:1 ratio of participants to PCPs in CY 2018.

Quality of Care and Health Promotion

Improving the quality of services delivered to HealthChoice participants is a core aim of the program. Performance measures in this report are selected because they either measure quality of health care directly or indicate utilization and performance indirectly related to providing quality health services. Additionally, HealthChoice has two programs focusing on measuring and improving quality of care: the Value-Based Purchasing (VBP) program and the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) annual review.

The Department's priorities and analysis of population health needs may change the VBP measures as the program strives for consistency with CMS's national performance measures for Medicaid. The VBP program adjusts a portion of MCO payments according to their scores on specific measures of clinical quality outcomes. Those MCOs that exceed a performance threshold receive enhanced incentive payments. MCOs whose performance is less than the standard pay penalties. Although the MCOs demonstrated varied results across the assessed measures, the VBP program overall supports quality improvement across the HealthChoice population by basing the incentive levels on averages of all plan performance.

The EPSDT annual review assesses MCO performance on services to children under the age of 21. EPSDT services are a national requirement for Medicaid, and the EPSDT review measures whether all HealthChoice MCOs achieve minimum levels of performance in delivering EPSDT. The most recent review shows that the MCOs meet or exceed standards across the board.

Another goal of the HealthChoice program is to prioritize health promotion and disease prevention by providing access to immunizations and other wellness services, such as regular prenatal care. The Healthcare Effectiveness Data and Information Set (HEDIS®) compares HealthChoice against nationally recognized performance standards for the use of preventive care and management of chronic disease conditions (MetaStar, Inc., 2019). Over the evaluation period, measures based on service utilization varied, in part because of the influx of adults into the HealthChoice population resulting from the ACA expansion. These new participants took longer to engage in appropriate primary care treatment. The addition of new MCOs in CYs 2014 and 2017 also affected HealthChoice HEDIS® scores because the methodology for determining these scores calculates a simple average across the plans instead of a weighted average.

Nevertheless, many indicators showed improvement over the evaluation period. Breast cancer screening rates improved during the evaluation period by 1.4 percent, contributing to better preventive care for women and remaining above the national Medicaid average since CY 2014. Rates for well-child visits, well-care visits, and immunizations were consistently higher than national Medicaid averages. Blood lead screening rates for children aged 12 to 23 months and 24 to 35 months also improved.

Although the percentage of women in HealthChoice who received a cervical cancer screening declined from 65.8 percent in CY 2014 to 62.2 percent in CY 2018, the rate continues to be above the national HEDIS® mean. Declines in the outcome of cervical pre-cancer are observed with widespread vaccinations for human papillomavirus (HPV) (McClung et al., 2019). Adolescents who received two HPV vaccine doses between their 9th and 13th birthdays increased from 19.2 percent in CY 2014 to 33.7 percent in CY 2018. Colorectal screening rates increased from 32.1 percent in CY 2014 to 40.7 percent in CY 2018 and is expected to continue to increase as ACA expansion participants have longer enrollment periods.

The percentage of pregnant women who received prenatal services in a timely manner increased by 3.3 percentage points from CY 2014 to CY 2018, and HealthChoice outperformed the national HEDIS® mean throughout the evaluation period.

Medical Home

Another goal of the HealthChoice program is to provide patient-focused, comprehensive, and coordinated care for its participants by providing each member with a single “medical home” through a PCP. With a greater understanding of the resources available to them, HealthChoice participants should seek care for non-emergent conditions in an ambulatory care setting rather than using the ED or letting an ailment exacerbate to the extent that it could warrant an inpatient hospital admission. One method to achieve this goal is to measure whether participants can identify with and effectively navigate a medical home. During the evaluation period, the rate of potentially avoidable ED visits—an indicator of performance in this area—decreased from 47.3 percent in CY 2014 to 41.0 percent in CY 2018. The percentage of HealthChoice adults with an inpatient admission designated as potentially preventable also decreased slightly, from 1.0 percent in CY 2014 to 0.9 percent in CY 2018. The state is working

with CMS to monitor several hospital quality measures, including Prevention Quality Indicator (PQI) admissions across Medicaid, Medicare, and commercial payers under Maryland's All-Payer Model Agreement—and subsequent Total Cost of Care Model. The model places global budget limits on hospitals, which reduces hospitals' incentives to increase admissions. The Department will use these tools to continue to monitor the rate of PQI admissions and will research policies to reduce their frequency.

Chronic Conditions

Another goal of the HealthChoice program is to prioritize management of chronic conditions such as asthma, diabetes, HIV/AIDS, and behavioral health diagnoses. Among measures of the quality of care for chronic conditions, the percentage of participants with asthma who remained on asthma controller medication for at least half of their treatment period rose from 51.5 percent in CY 2014 to 59.6 percent in CY 2018.

The rate of hemoglobin A1c (HbA1c) screenings among participants with diabetes decreased slightly by 0.2 percentage points but remained close to the national HEDIS® mean. The percentage of participants with diabetes who received an eye exam decreased by 7.4 percentage points between CY 2014 and CY 2018. The decrease may be a result of the removal of this measure from the VBP incentive program in CY 2015. During the evaluation period, inpatient and ED utilization decreased by 3.2 and 6.0 percentage points, respectively, among HealthChoice participants with diabetes, while ambulatory care utilization remained stable.

Participants with HIV/AIDS maintained stable ambulatory care service utilization and CD4 cell count testing rates during the evaluation period. Viral load testing and antiretroviral therapy (ART) increased by 7 and 6 percentage points, respectively. ED utilization by this population decreased by 8.4 percentage points during the evaluation period.

The percentage of participants with a behavioral health diagnosis increased from 15.2 percent in CY 2014 to 17.5 percent in CY 2018. Utilization of ambulatory care services increased by 1.7 percent during the evaluation period among HealthChoice participants with a behavioral health diagnosis, while inpatient and ED utilization decreased by 2.4 and 6.0 percentage points, respectively.

Care for Special Populations

HealthChoice continues to seek ways to improve the quality and access to health services for vulnerable populations, including children in foster care, Rare and Expensive Case Management (REM) participants, and racial and ethnic minorities. The Department also monitors demographic characteristics and service utilization among the ACA Medicaid expansion population.

Children in foster care showed positive trends in service utilization; however, in CY 2018, they had a 3.5 percentage point lower rate of ambulatory care service utilization and a 9.0 percentage point higher rate of ED visits compared to other children in HealthChoice. The REM program experienced increases in preventive care: the percentage of participants with a dental visit and

ambulatory care increased during the evaluation period, while outpatient ED visits and inpatient admissions declined. As for racial and ethnic disparities in access to care, Black and Native American children had lower rates—and Hispanic children had higher rates—of ambulatory care visits than other children did in both CY 2014 and CY 2018. Among the entire HealthChoice population, Black participants also had the highest ED utilization rates, while Asian participants had the lowest.

Demonstration Programs

Another goal of the HealthChoice program is to use §1115 demonstration authority to test emerging practices through innovation and pilot programs to better serve participants. As part of its waiver renewal in 2016, the Department proposed the following innovative programs: Residential Treatment for Individuals with SUD; the Evidence-Based Home Visiting Services (HVS) and Assistance in Community Integration Services (ACIS) Community Health Pilots; and dental services for former foster care individuals.

With CMS approval, Maryland Medicaid participants aged 21 years and over with SUDs can now receive residential treatment services—up to two (2) 30-day stays—in institutions for mental disease (IMDs). Given the current opioid epidemic, this is particularly important as it allows the state to expand access across the care continuum. From July 1, 2017, to June 30, 2018 (fiscal year [FY] 2018), 8,747 participants received these services under the waiver. This increased to 10,611 participants in FY 2019.

Beginning in January 2017, Maryland initiated coverage of dental services for former foster care participants through the age of 26. Of former foster youth enrolled for at least 320 days in CY 2017, over 21 percent had at least one dental visit; this increased to over 22 percent in CY 2018. The Department anticipates that these rates will continue to increase over time.

The Department also renewed the Increased Community Services (ICS) and the Family Planning Programs from previous waiver periods. The ICS program allows certain adults with physical disabilities to remain in the community as an alternative to institutional care. All ICS measures had 100 percent compliance from implementation through CY 2018.

Lastly, the Family Planning Program automatically enrolls women for 12 months who no longer qualify for Medicaid after pregnancy because they are over the income limit. From CY 2014 to CY 2018, both the number of women enrolled in the Family Planning Program and the use of services decreased. The decline in enrollment may be attributed to the ACA expansion in CY 2014, which increased the number of women who were eligible for full Medicaid benefits and decreased the number of women who needed family planning-only services.

Evaluation of the Maryland Medicaid HealthChoice Program: CY 2014 to CY 2018

Section I. Introduction

In 1997, Maryland implemented HealthChoice—a statewide mandatory Medicaid and Children's Health Insurance Program (CHIP) managed care program—as a waiver of standard federal Medicaid rules, under authority of §1115 of the Social Security Act. The Centers for Medicare & Medicaid Services (CMS) approved subsequent waiver renewals in 2005, 2007, 2010, 2013, and 2016. The Maryland Department of Health (the Department) continually monitors HealthChoice performance on a variety of measures across the demonstration's goals, culminating in an annual evaluation.

This report—the 2020 annual evaluation—includes data from calendar year (CY) 2014 through CY 2018. The following sections provide a brief overview the HealthChoice program and recent program updates before addressing the following goals:

- Coverage and access to care
- Quality of care
- Medical home utilization and appropriateness of care
- Preventive care and management of chronic diseases
- Innovative programs approved under the demonstration

This report is a collaborative effort between the Department and The Hilltop Institute at the University of Maryland, Baltimore County (UMBC).

Overview of the HealthChoice Program

As of the end of CY 2018, over 89 percent of the state's Medicaid and Maryland Children's Health Program (MCHP) populations were enrolled in HealthChoice. HealthChoice participants choose a managed care organization (MCO) and a primary care provider (PCP) from their MCO's network to oversee their medical care. Participants who do not select an MCO or a PCP are assigned to one automatically. The groups of Medicaid-eligible individuals who enroll in HealthChoice MCOs include the following:

- Families with low income that have children
- Families that receive Temporary Assistance for Needy Families (TANF)
- Children younger than 19 years who are eligible for MCHP
- Children in foster care and, starting in CY 2014, individuals up to age 26 who were previously in foster care
- Starting in CY 2014, adults under the age of 65 with income up to 138 percent of the federal poverty level (FPL)

- Women with income up to 264 percent of the FPL who are pregnant or less-than-60-days postpartum
- Individuals receiving Supplemental Security Income (SSI) who are under 65 and ineligible for Medicare

Not all Maryland Medicaid participants are eligible for the HealthChoice managed care program. Groups that are ineligible for enrollment in the managed care program include the following:

- Medicare beneficiaries
- Individuals aged 65 years and older[3]
- Individuals in a "spend-down" eligibility group who are only eligible for Medicaid for a limited time
- Individuals who require more than 90 days of long-term care services and are subsequently disenrolled from HealthChoice
- Individuals who are continuously enrolled in an institution for mental disease (IMD) for more than 30 days
- Residents of an intermediate care facility for individuals with intellectual disabilities
- Individuals enrolled in the Model Waiver or the Employed Individuals with Disabilities (EID) programs

There are additional populations covered under the HealthChoice waiver who do not enroll in HealthChoice MCOs, including individuals in the Family Planning and the Rare and Expensive Case Management (REM) programs. The Family Planning program is a limited-benefit program under the waiver. The REM program allows HealthChoice-eligible individuals with certain rare and expensive diagnoses to receive care on a fee-for-service (FFS) basis. REM is discussed in more detail in Section VI of this report, and Family Planning is discussed in Section VII.

HealthChoice participants receive the same comprehensive benefits as those available to Maryland Medicaid participants through the FFS system. MCOs were responsible for coverage of most medical services during 2018, including the following:

- Inpatient and outpatient hospital care
- Physician care
- Federally qualified health center (FQHC) or other clinic services
- Laboratory and X-ray services
- Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) services for children under 21

[3] Individuals aged 65 and older can be enrolled in a HealthChoice MCO if covered as a parent or caretaker.

- Prescription drugs, except for behavioral health and Human Immunodeficiency Virus or Acquired Immune Deficiency Syndrome (HIV/AIDS) drugs
- Durable medical equipment and disposable medical supplies
- Home health care
- Vision services including corrective lens and hearing aids for children under 21 (although not required by regulation, some MCOs cover adults for particular limited vision, hearing, and dental benefits)
- Dialysis
- The first 90 days of long-term care services

The following services are not covered by the MCOs and instead are covered by the Medicaid FFS system:

- Specialty mental health care and substance use disorder (SUD) treatment services[4]
- Dental care for children, pregnant women, and adults in the REM program
- Health-related services and targeted case management services provided to children when the services are specified in the child's Individualized Education Plan or Individualized Family Service Plan
- Therapy services (occupational, physical, and speech) for children
- Personal assistance services offered under the Community First Choice program
- Viral load testing services, genotypic, phenotypic, or other HIV/AIDS drug resistance testing for the treatment of HIV/AIDS
- HIV/AIDS and behavioral health drugs
- Services covered under 1915(c) home- and community-based services waivers[5]

Program Updates

The Department implemented the following changes to the HealthChoice program during the evaluation period:

- From the inception of the HealthChoice program in 1997, mental health services were carved out of the benefit package, while services for individuals with SUDs were provided by the MCOs. The Department combined mental health and SUD services in an integrated carve-out on January 1, 2015. Under the carve-out, an administrative services organization (ASO) administers and reimburses all specialty mental health and SUD

[4] SUD services were carved out of the MCO benefit package on January 1, 2015. Mental health services have never been included in the MCO benefit package.

[5] Services covered under the 1915(c) home- and community-based waivers include assisted living, medical day care, family training, case management, senior center plus, dietitian and nutritionist services, and behavioral consultation.

services for Medicaid participants on an FFS basis, under the oversight of the Medicaid program and the Behavioral Health Administration (BHA).

- In 2013, the Department implemented a §2703 Chronic Health Home program, serving adults diagnosed with a serious and persistent mental illness, children diagnosed with a serious emotional disturbance, and individuals diagnosed with an opioid SUD who are at risk for another chronic condition based on tobacco, alcohol, or other non-opioid substance use. As of May 1, 2020, the Department had approved 104 Chronic Health Home site applications, with 10,473 (9,446 adults, 1,027 children/youth) enrolled participants. The Health Home sites include 70 psychiatric rehabilitation programs, 12 mobile treatment providers, and 22 opioid treatment programs.
- Under the ACA, Maryland expanded coverage through the Medicaid program to two new populations:
    - Individuals with income up to 138 percent of the FPL. Over the course of the expansion's first year (CY 2014), 283,716 adults received Medicaid coverage through this expansion. This included more than 90,000 former Primary Adult Care (PAC) program participants who automatically transferred into expansion coverage.[6] As of December 2018, there were 315,061 individuals enrolled in the ACA expansion.
    - Former foster care children up to the age of 26 years.

The Department is now including several initiatives for innovative programs that were recently approved for the CY 2017 to CY 2021 waiver period. See Section VII for additional information on the following initiatives:

- Residential Treatment for Individuals with SUDs aged 21 through 64 years
- Two community health pilot programs
    - Evidence-Based Home Visiting Services (HVS)
    - Assistance in Community Integration Services (ACIS)
- Dental benefits for former foster youth between the ages of 21 and 26 years

[6] The PAC program offered a limited benefit package to adults with low income, covering primary care visits, certain outpatient mental health and substance use disorder services, ED services, and prescription drugs.

Section II. Improve Access to Care for the Medicaid Population

The HealthChoice demonstration depends on managed care programs improving access to care for participants. This section measures Maryland's progress toward improving access to care by examining enrollment, network adequacy, and utilization.

Enrollment

HealthChoice Enrollment

The population served by HealthChoice can be measured in terms of the number of individuals with any period of enrollment during a given calendar year, including individuals who may not have been enrolled for the entire year. Another method is to count individuals enrolled at a particular point in time (e.g., enrollment as of December 31). Program enrollment on a given day is smaller than the number of enrollees served over the course of a year as individuals move in and out of Medicaid eligibility. Unless otherwise stated, the enrollment data in this section of the report use the point-in-time methodology to reflect enrollment as of December 31 of the measurement year.[7] Occasionally, measures will specify that they include persons enrolled at any time during the year.

Table 1 displays demographic characteristics of the HealthChoice population for those with any period of enrollment in CY 2014 through CY 2018. The total number of participants increased by 11.1 percent during the evaluation period. The distribution of demographic characteristics remained relatively consistent throughout the evaluation period except for race/ethnicity. The number of participants who reported their race as "Other" more than doubled from CY 2014 to CY 2018, most likely due to changes in race reporting requirements.

[7] Enrollment data are presented for individuals aged 0 through 64 years. Age is calculated as of December 31 of the measurement year.

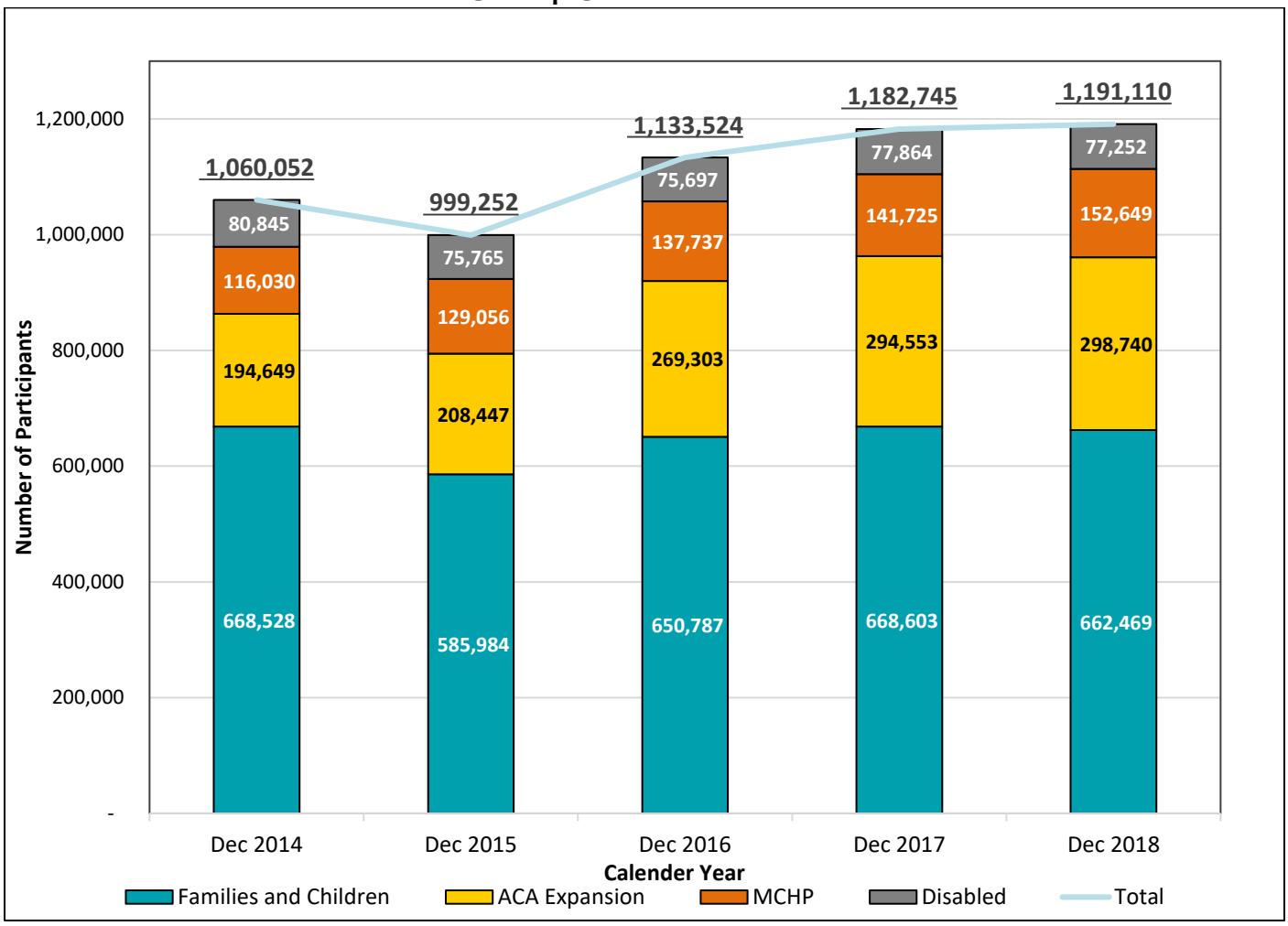
Table 1. HealthChoice Population (Any Period of Enrollment) by Demographics, CY 2014 and CY 2018

Demographic Characteristic	CY 2014		CY 2018	
	# of Participants	% of Total	# of Participants	% of Total
Sex				
Female	684,322	54.7%	748,082	53.8%
Male	566,312	45.3%	641,634	46.2%
Total	**1,250,634**	**100%**	**1,389,716**	**100%**
Age Group (Years)				
0–<1	36,529	2.9%	35,957	2.6%
1–2	78,976	6.3%	78,942	5.7%
3–5	115,048	9.2%	113,841	8.2%
6–9	148,977	11.9%	148,274	10.7%
10–14	152,955	12.2%	176,049	12.7%
15–18	107,403	8.6%	117,167	8.4%
19–20	46,264	3.7%	51,214	3.7%
21–39	319,413	25.5%	385,419	27.7%
40–64	245,069	19.6%	282,853	20.4%
Total	**1,250,634**	**100%**	**1,389,716**	**100%**
Race/Ethnicity				
Asian	51,473	4.1%	62,905	4.5%
Black	581,830	46.5%	578,924	41.7%
White	370,076	29.6%	376,203	27.1%
Hispanic	127,218	10.2%	110,764	8.0%
Native American	3,344	0.3%	4,047	0.3%
Other*	116,693	9.3%	256,873	18.5%
Total	**1,250,634**	**100%**	**1,389,716**	**100%**
Region**				
Baltimore City	243,110	19.4%	246,054	17.7%
Baltimore Metro	356,556	28.5%	407,793	29.3%
Eastern Shore	116,720	9.3%	128,946	9.3%
Southern Maryland	63,610	5.1%	69,999	5.0%
Washington Metro	367,383	29.4%	421,929	30.4%
Western Maryland	100,969	8.1%	113,796	8.2%
Out of State	2,286	0.2%	1,199	0.1%
Total	**1,250,634**	**100%**	**1,389,716**	**100%**

*Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.
**Regions are defined as the following: Baltimore City (only), Baltimore Metro (Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties), Eastern Shore (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties), Southern Maryland (Calvert, Charles, and St. Mary's Counties), Washington Metro (Montgomery and Prince George's Counties) and Western Maryland (Allegany, Frederick, Garrett, and Washington Counties).

Figure 1 displays HealthChoice enrollment by coverage category.[8] Since the ACA expansion in CY 2014, the overall HealthChoice population has grown by 12.4 percent. However, the enrolled population decreased by 5.7 percent between CY 2014 and CY 2015, when eligibility determinations were re-instated, before increasing again in CY 2016.[9]

Figure 1. HealthChoice Enrollment by Coverage Category as of December 31, CY 2014–CY 2018*



*Enrollment counts in Figure 1 include participants aged 0-64 years who are enrolled in a HealthChoice MCO.

[8] The F&C category is families, children, and pregnant women.

[9] Data for each year were updated to reflect a change in how coverage groups were categorized and to add a category for participants enrolled in ACA expansion coverage groups. See Appendix for an explanation of which Medicaid coverage groups are included in each category.

Enrollment Growth

As of December 2018, national enrollment in Medicaid and CHIP was 72.1 million (The Kaiser Family Foundation State Health Facts, n.d.a). In fiscal year (FY) 2019, overall enrollment declined by 1.7 percent (Rudowitz, Hinton, Diaz, Guth, & Tan, 2019). The national enrollment growth has continued to slow partly because of the tapering of the ACA enrollment. Between the summer of 2013 and the end of 2018, Maryland experienced the 11th highest growth rate in Medicaid and CHIP enrollment out of the 48 states and the District of Columbia that reported data (The Kaiser Family Foundation State Health Facts, n.d.a). In 2013, before the ACA expansion, 10 percent of Maryland residents were uninsured. The growth in Medicaid enrollment contributed to a decline in Maryland's uninsured rate from 8 percent in CY 2014 to 6 percent in CY 2018 (The Kaiser Family Foundation State Health Facts, n.d.b). Table 2 shows the percentage of Maryland's population enrolled in HealthChoice between CY 2014 and CY 2018. Almost all new Maryland Medicaid participants are enrolled in managed care.

Table 2. HealthChoice Enrollment as a Percentage of the Maryland Population, CY 2014–CY 2018

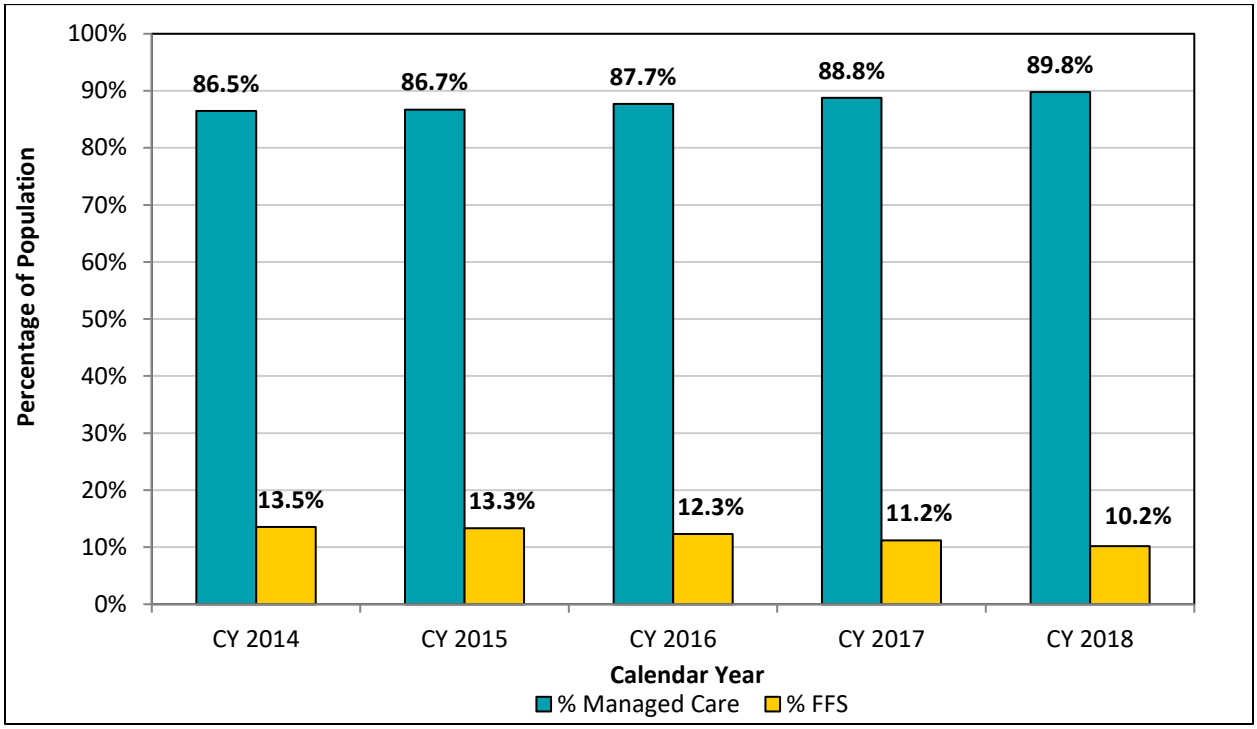
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Maryland Population*	5,970,245	6,000,561	6,024,752	6,052,177	6,042,718
Individuals Enrolled in HealthChoice for Any Period of Time During the Year					
HealthChoice Population	1,251,023	1,304,492	1,285,807	1,355,443	1,389,716
% of Population in HealthChoice	21.0%	21.7%	21.3%	22.4%	23.0%
Individuals Enrolled in HealthChoice as of December 31					
HealthChoice Population	1,060,192	999,252	1,133,524	1,182,745	1,191,110
% of Population in HealthChoice	17.8%	16.7%	18.8%	19.5%	19.7%

*Data source: U.S. Census Bureau, Population Division. Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2018. Retrieved from https://www.census.gov/quickfacts/fact/table/MD,US/PST045218

Managed Care Enrollment

Since its inception, HealthChoice was expected to enroll a high percentage of Medicaid participants into managed care. Figure 2 compares Medicaid managed care and FFS enrollment. Between CY 2014 and CY 2018, managed care enrollment remained consistently above 86.0 percent, with the highest rate of 89.8 percent in CY 2018.

Figure 2. Percentage of Medicaid[10] Participants in Managed Care Compared to FFS, CY 2014–CY 2018



Due to a change in the system for eligibility redetermination in CY 2015, the Department began monitoring HealthChoice participants to ensure they did not have a gap or interruption in Medicaid coverage as a result of this change. Table 3 displays the number and percentage of HealthChoice participants with a gap in Medicaid enrollment of one or more days during the calendar year. The length of the gap in enrollment from CY 2016 through CY 2018 is also presented.[11] The percentage of HealthChoice participants with at least one gap in coverage remained stable during the evaluation period at around 8 percent. Among participants with a gap in coverage in CY 2018, 77.3 percent had a gap of 180 days or less, and 22.7 percent had a gap of 181 days or more.

Table 3. Number of HealthChoice Participants with a Gap in Medicaid Coverage, by Length of Gap, CY 2016–CY 2018

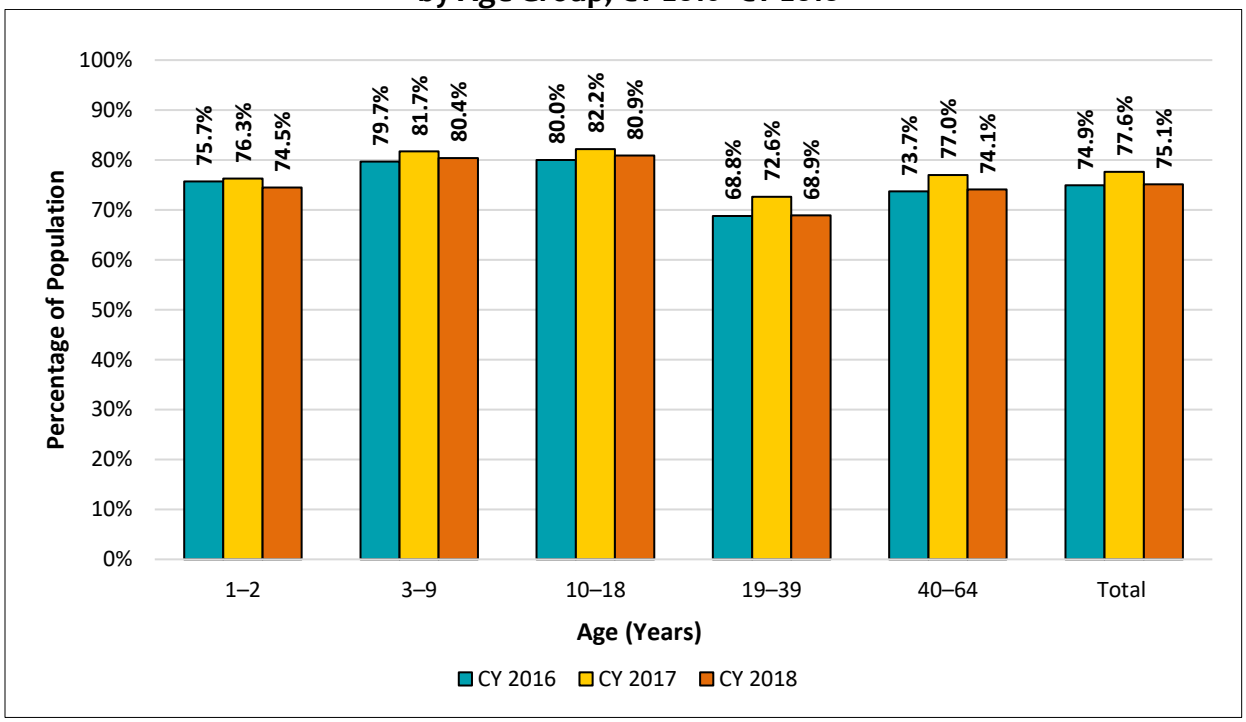
Calendar Year	Total	At Least One Gap in Medicaid Coverage		Length of Coverage Gap			
				180 Days or Less		181 Days or More	
		#	%	#	%	#	%
2016	1,285,347	107,214	8.3%	83,997	78.3%	23,217	21.7%
2017	1,355,225	113,309	8.4%	88,965	78.5%	24,344	21.5%
2018	1,389,716	113,801	8.2%	87,976	77.3%	25,825	22.7%

[10] "Medicaid" is representative of both Medicaid and MCHP.

[11] Evaluation of this measure began in CY 2016 because a change in the system for eligibility determinations in CY 2015 resulted in a large amount of people dropping out of Medicaid.

Figure 3 shows the percentage of HealthChoice participants who were continuously enrolled for all 12 months during the calendar year, without interruptions, by age group, from CY 2016 through CY 2018. Participants with continuous enrollment increased by 0.2 percentage points. Participants aged 1 to 2 years were the only age group to experience a decrease in continuous enrollment by 1.2 percentage points.

Figure 3. Percentage of HealthChoice Participants with Continuous Medicaid Enrollment, by Age Group, CY 2016–CY 2018



Enrollment and MCO Selection through the Maryland Health Connection

Maryland Health Connection (MHC) is the state's official health insurance marketplace, where consumers can apply for and enroll in qualified health plans (QHPs) and income-based Medicaid/MCHP (referred to as modified adjusted gross income, or MAGI). The MHC portal provides a single, streamlined application process for both programs. Consumers who indicate interest in insurance affordability programs on the application are screened for eligibility for Medicaid/MCHP and financial assistance for QHPs. While the majority of HealthChoice participants' eligibility is determined through MHC, MHC only processes those who are eligible for MAGI-based Medicaid. It does not include non-MAGI enrollment, which is processed through a different system, and thus is an undercount of total enrollment. In partnership with the Maryland Health Benefit Exchange (MHBE), the entity that oversees MHC, the Department continues to upgrade the functionality of MHC to improve the enrollment experience and enhance access to care. For example, approximately 60 percent of Medicaid participants are automatically-renewed for coverage each month because their applications can be redetermined using administrative data, facilitating seamless coverage.

Network Adequacy

Another method of measuring enrollee access to care is to examine provider network adequacy. This section of the report examines PCP and specialty provider networks.

PCP Network Adequacy

HealthChoice requires every participant to have a PCP, and each MCO must have enough PCPs to serve its enrolled population. HealthChoice regulations require each MCO to have a ratio of 1 PCP to every 200 participants within each of the 40 local access areas (LAAs) in the state that they serve to consider the network coverage to be adequate.[12] The Department assesses network adequacy periodically throughout the year and works with the MCOs to resolve capacity issues. In the case of any issues, the Department discontinues new enrollment for that MCO in the affected region until it increases provider contracts to an adequate level.

Table 4 shows PCP network adequacy as of December 2018. The network adequacy analysis counted the number of PCP offices included in provider networks in each county in Maryland. In CY 2018, all jurisdictions achieved a 200:1 ratio of participants to PCPs.

Table 4. PCP Capacity, by County, December 2018[13]

County	Number of PCP Offices	Capacity at 200:1	Total Dec 2018 Enrollment	Excess Capacity Difference 200:1 Ratio
Allegany	108	21,600	17,651	3,949
Anne Arundel	827	165,400	82,722	82,678
Baltimore City	2187	437,400	216,469	220,931
Baltimore County	1592	318,400	170,406	147,994
Calvert	134	26,800	12,307	14,493
Caroline	76	15,200	10,361	4,839
Carroll	238	47,600	19,318	28,282
Cecil	152	30,400	22,979	7,421
Charles	205	41,000	27,727	13,273
Dorchester	80	16,000	10,810	5,190
Frederick	270	54,000	35,044	18,956
Garrett	49	9,800	6,984	2,816
Harford	311	62,200	38,527	23,673

[12] COMAR 10.67.05.05(B).

[13] Providers were identified by their license numbers. If a license number was unavailable, the provider's national provider identifier (NPI) was used. If a provider had more than one office location in a county, only one office was counted. If a provider had multiple office locations among different counties, one office was counted in each county. PCPs in Washington, DC were not included in the analysis. Although the regulations apply to a single MCO, this analysis aggregated data from all nine MCOs.

County	Number of PCP Offices	Capacity at 200:1	Total Dec 2018 Enrollment	Excess Capacity Difference 200:1 Ratio
Howard	448	89,600	38,445	51,155
Kent	26	5,200	4,194	1,006
Montgomery	1292	258,400	156,909	101,491
Prince George's	1014	202,800	200,431	2,369
Queen Anne's	82	16,400	7,239	9,161
Somerset	51	10,200	7,208	2,992
St. Mary's	171	34,200	19,463	14,737
Talbot	169	33,800	7,138	26,662
Washington	226	45,200	37,123	8,077
Wicomico	178	35,600	29,452	6,148
Worcester	112	22,400	11,456	10,944
Total (in MD)	**9,998**	**1,999,600**	**1,190,363**	**809,237**
Other	461			
Washington, DC	972			

Specialty Care Provider Network Adequacy

In addition to ensuring PCP network adequacy, the Department requires MCOs to provide all medically-necessary specialty care. If an MCO does not have the appropriate in-network specialist needed to meet an enrollee's medical needs, then it must arrange for care with an out-of-network specialist and compensate the provider. Regulations for specialty care access require each MCO to have an in-network contract with at least one provider statewide in 14 major medical specialties.[14] These medical specialties include allergy, cardiology, dermatology, endocrinology, otolaryngology (ENT), gastroenterology, infectious disease, nephrology, neurology, ophthalmology, orthopedics, pulmonology, surgery, and urology. Additionally, for each of the 10 specialty care regions throughout the state that an MCO serves, an MCO must include at least one in-network specialist in each of the eight core specialties: cardiology, otolaryngology, gastroenterology, neurology, ophthalmology, orthopedics, surgery, and urology.

Utilization

With the continued increase in HealthChoice enrollment, it is important to maintain access to care. This section of the report examines service utilization related to ambulatory care, emergency department (ED) visits, and inpatient admissions. Unless otherwise stated, all measures in this section are calculated for HealthChoice participants with any period of enrollment in HealthChoice during the calendar year.

[14] COMAR 10.67.05.05-1.

Ambulatory Care Visits

The Department monitors ambulatory care utilization as a measure of access to care. When properly accessing care, HealthChoice participants should receive care in an ambulatory care setting rather than use the ED for a non-emergent condition or allow a condition to exacerbate to the extent that it requires an inpatient admission. For this analysis, an ambulatory care visit is defined as contact with a doctor, nurse practitioner, or physician assistant in a clinic, physician's office, or hospital outpatient department by an individual enrolled in HealthChoice at any time during the measurement year. The definition excludes outpatient ED visits, hospital inpatient services, home health services, X-rays, and laboratory services.

Figure 4 presents the percentage of HealthChoice participants who received an ambulatory care visit during the calendar year by age group. Between CY 2014 and CY 2018, children under age two had the highest ambulatory care visit rate, while participants aged 19 to 39 years had the lowest rate. Although ambulatory care visit rates remained stable for each age group from CY 2014 to CY 2018, there was a 1.1 percentage point increase among participants under the age of 1, and a 2.2 percentage point increase for participants aged 10 to 18 years.

Figure 4. Percentage of the HealthChoice Population with an Ambulatory Care Visit, by Age Group, CY 2014–CY 2018

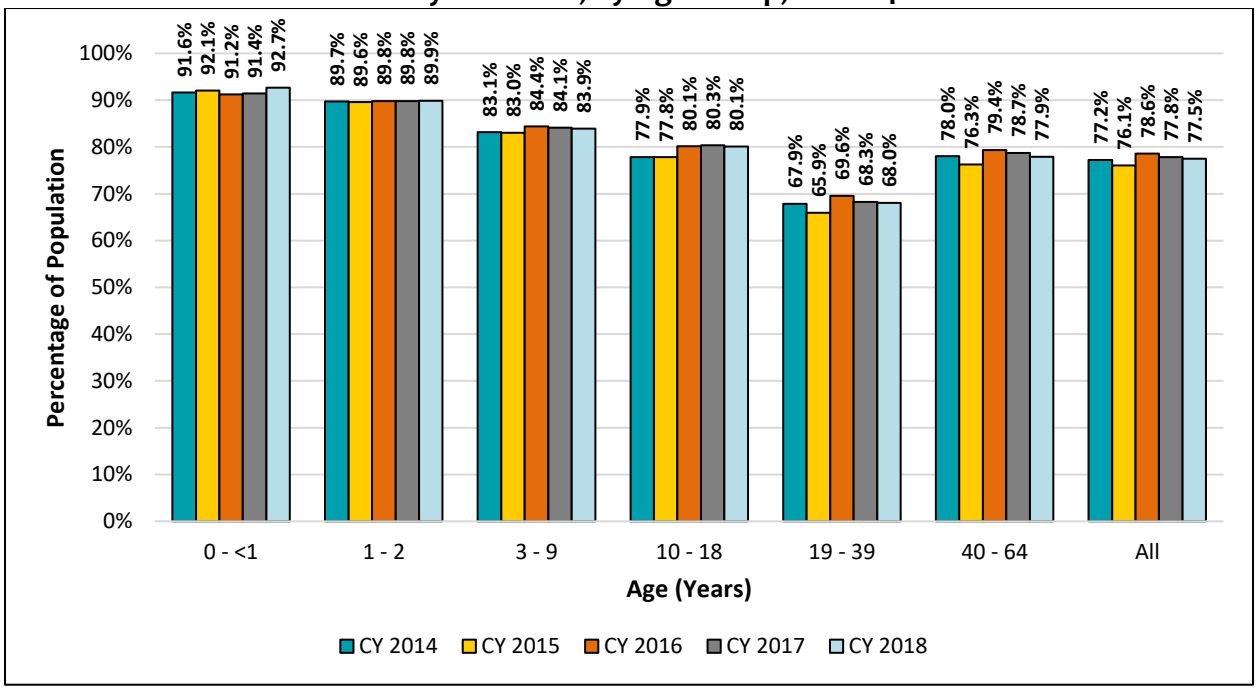


Figure 5 presents ambulatory care use by coverage category. The decrease in utilization among the overall HealthChoice population in CY 2014 and CY 2015 was likely due to the influx of new participants into the ACA expansion coverage category. These individuals accessed ambulatory care services at lower rates than participants in other coverage categories. ACA expansion participants constitute a large segment of the HealthChoice population, so their utilization affects the trend for the entire population.

Figure 5. Percentage of the HealthChoice Population with an Ambulatory Care Visit, by Coverage Category, CY 2014–CY 2018

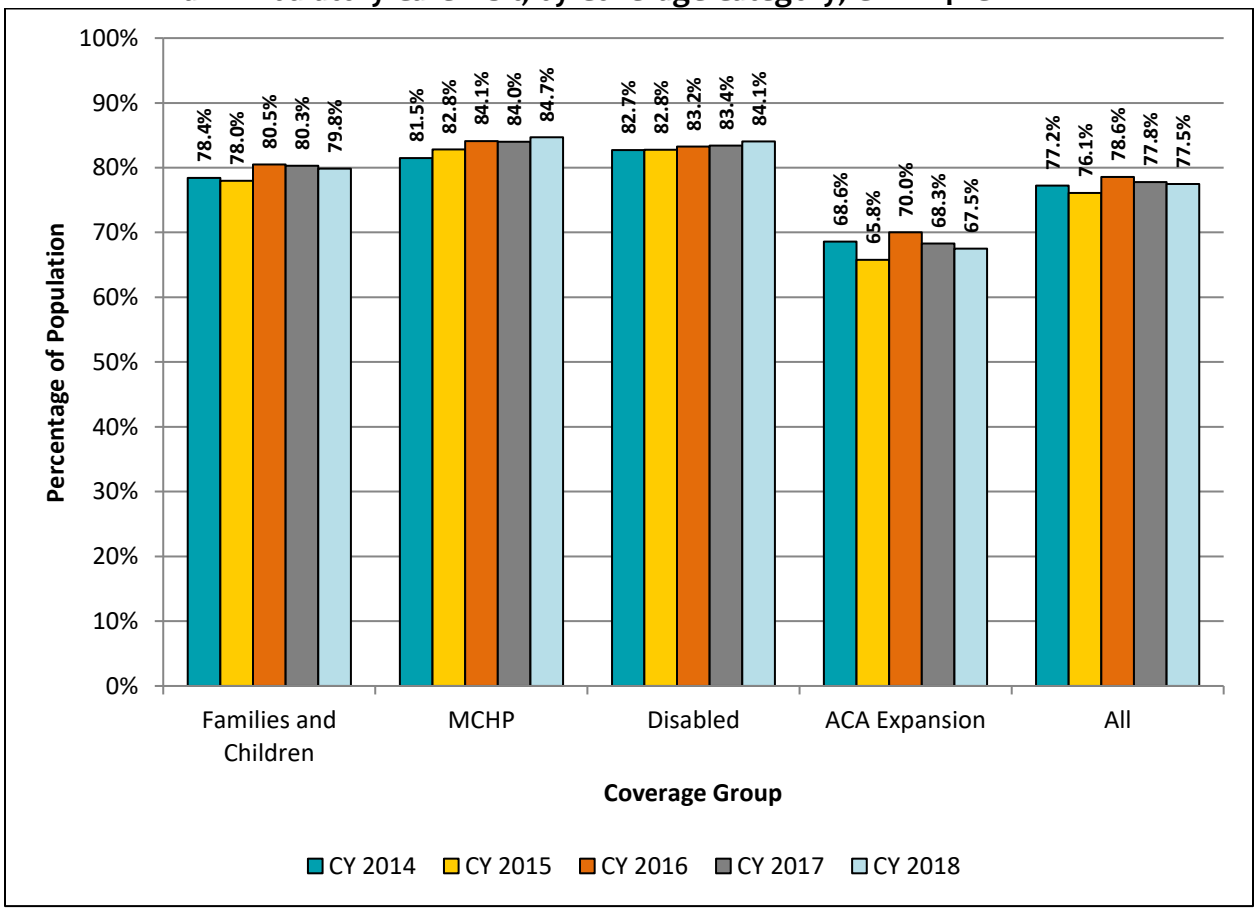
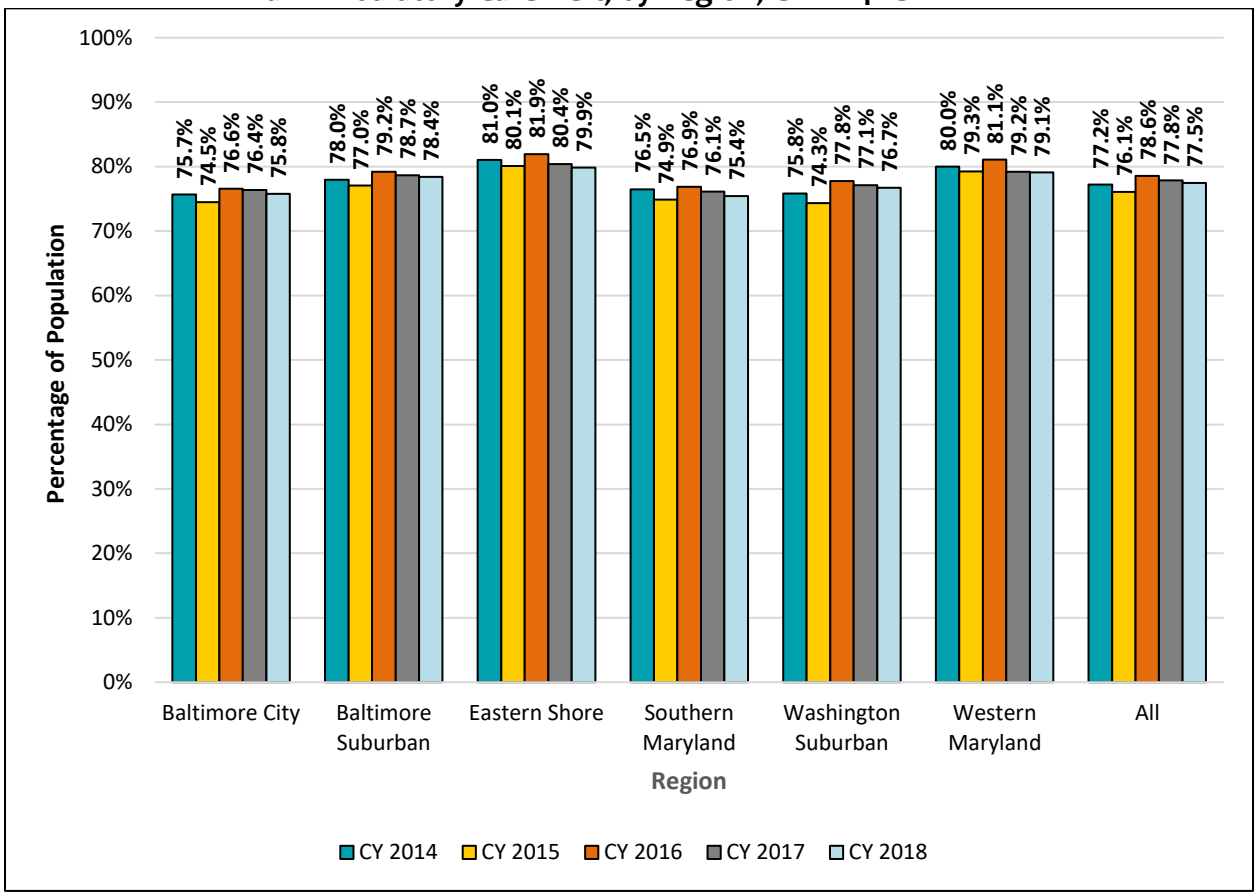


Figure 6 presents the percentage of the HealthChoice population who received an ambulatory care visit by region between CY 2014 and CY 2018. Ambulatory care utilization was similar across all regions during the evaluation period. Residents of the Eastern Shore region had the highest rate of ambulatory care use.

Figure 6. Percentage of the HealthChoice Population with an Ambulatory Care Visit, by Region, CY 2014–CY 2018



ED Utilization

As noted earlier, one of the goals of the HealthChoice program is to treat more conditions in an ambulatory care setting rather than in the ED. Based on the premise that a managed care system promotes ambulatory and preventive care, the need for emergency services should decline. 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. Unless otherwise noted, ED utilization measures in this report exclude ED visits that resulted in an inpatient hospital admission.

Figure 7 presents the percentage of HealthChoice participants with ED use by age group. The percentage with an outpatient ED visit decreased between CY 2014 and CY 2018 for all age groups. The largest declines were observed in the age groups of 1 to 2 years and 19 to 39 years.

Figure 7. Percentage of the HealthChoice Population with an Outpatient ED Visit, by Age Group, CY 2014–CY 2018

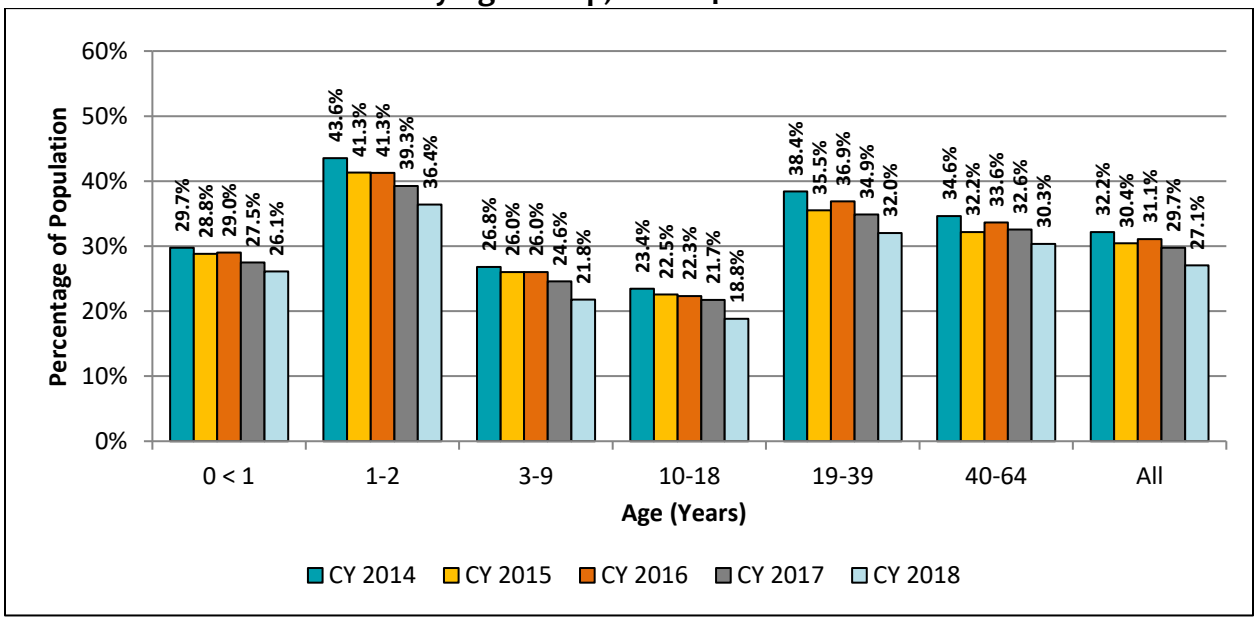


Figure 8 shows ED use by coverage category. Overall, the outpatient ED visit rate among all HealthChoice participants declined from CY 2014 to CY 2018. Among the coverage categories, participants with disabilities were the most likely to utilize ED services, although they still experienced a decrease: from 44.7 percent in CY 2014 and 39.6 percent in CY 2018.

Figure 8. Percentage of the HealthChoice Population with an Outpatient ED Visit, by Coverage Category, CY 2014–CY 2018

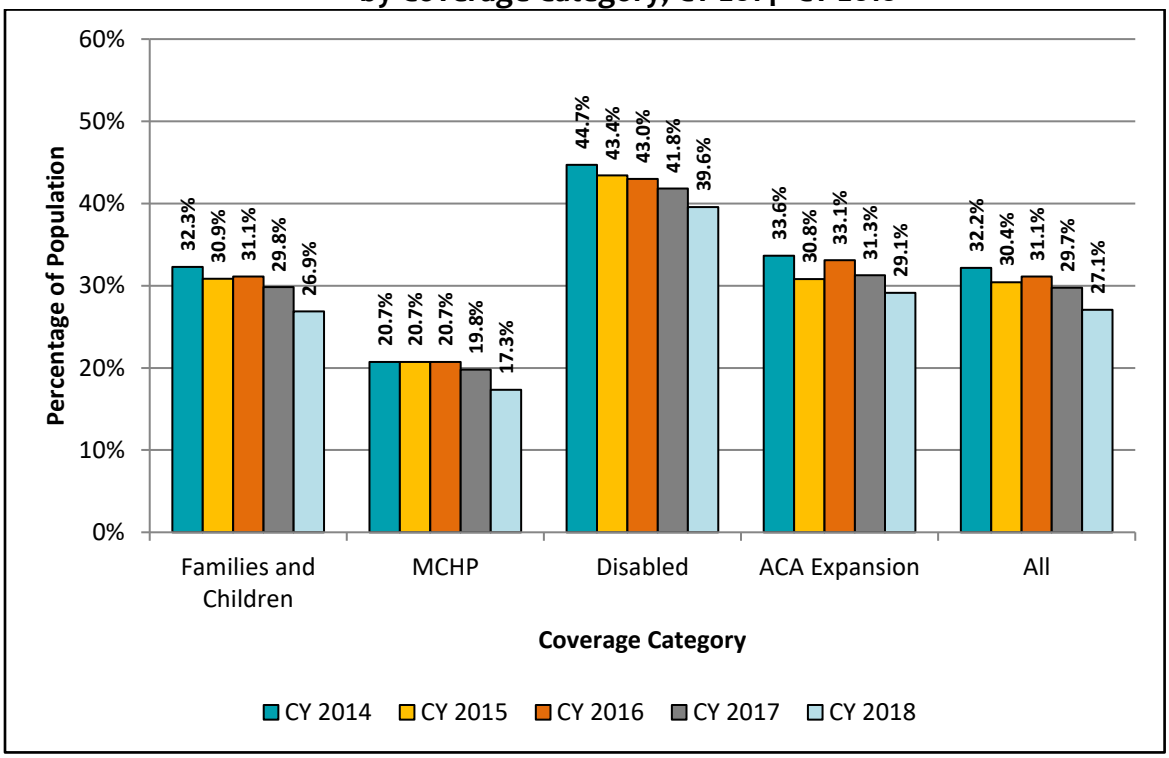


Figure 9 shows the percentage of HealthChoice participants with an ED visit by region between CY 2014 and CY 2018. Participants living in Baltimore City used ED services at the highest rates throughout the evaluation period; however, the rates fell by 4.9 percentage points from CY 2014 to CY 2018. In other regions, rates also declined, ranging from a reduction of 3.9 percentage points in the Eastern Shore to 5.4 percentage points in Western Maryland.

Figure 9. Percentage of the HealthChoice Population with an Outpatient ED Visit, by Region, CY 2014–CY 2018

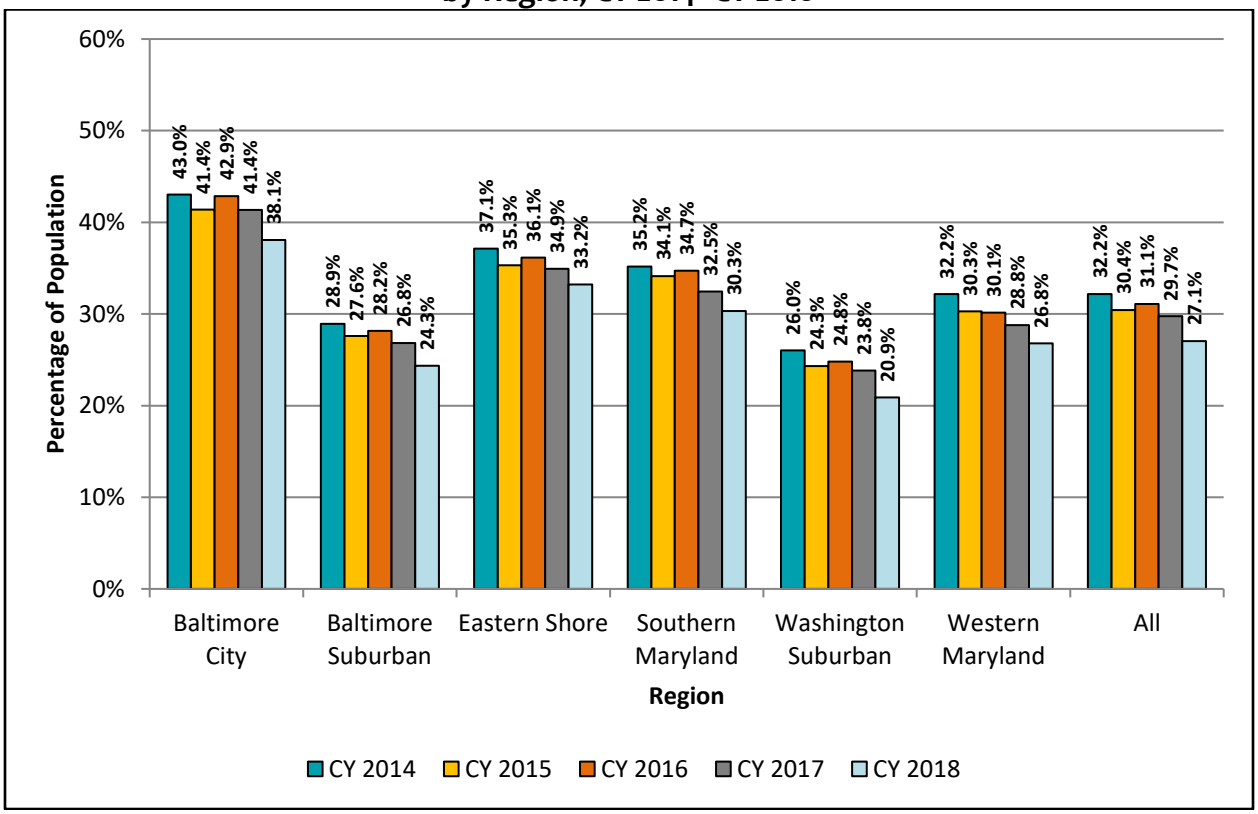


Table 5 presents the number and percentage of HealthChoice participants aged 0 to 64 years who had an outpatient ED visit, by age group, during CY 2014 and CY 2018. The percentage of participants with an ED visit decreased in each age group from CY 2014 to CY 2018, with the largest decline of 7.2 percent in 1- to 2-year-olds. The average number of ED visits by user also decreased from 2.0 to 1.8.

Table 5. Percentage of HealthChoice Participants with an Outpatient ED Visit and Average Number of Visits per User, by Age Group, CY 2014 and CY 2018

Age (Years)	Outpatient ED Visits							
	CY 2014				CY 2018			
	# of Participants	# with Visit	% with Visit	Average # Visits by User	# of Participants	# with Visit	% with Visit	Average # Visits by User
0 < 1	36,529	10,855	29.7%	1.7	35,957	9,389	26.1%	1.6
1–2	78,976	34,403	43.6%	2.0	78,942	28,722	36.4%	1.8
3–9	264,025	70,714	26.8%	1.6	262,115	57,121	21.8%	1.5
10–18	260,358	60,990	23.4%	1.6	293,216	55,144	18.8%	1.6
19–39	365,677	140,508	38.4%	2.4	436,633	139,751	32.0%	2.2
40–64	245,069	84,863	34.6%	2.5	282,853	85,844	30.3%	2.3
All	**1,250,634**	**402,333**	**32.2%**	**2.0**	**1,389,716**	**375,971**	**27.1%**	**1.8**

ED Visits with Inpatient Admission

Table 6 presents the number and percentage of HealthChoice participants who had an ED Visit that resulted in an inpatient admission, by demographic characteristics, in CY 2014 and CY 2018. The overall percentage of participants with an ED visit that resulted in an inpatient admission decreased from 4.1 percent in CY 2014 to 3.7 percent in CY 2018.

In CY 2018, Baltimore City had the highest percentage (5.7 percent) of participants with an ED visit that resulted in an inpatient hospitalization; however, the overall rate decreased slightly, by 0.7 percentage points from CY 2014. Among coverage groups, those who were disabled had the highest percentage (12.5 percent) of ED visits that resulted in an inpatient admission.

Table 6. Percentage of the HealthChoice Population with an ED Visit that Resulted in an Inpatient Admission, by Demographic and Coverage Category, CY 2014 and CY 2018

Demographic and Coverage Characteristics	CY 2014			CY 2018		
	Total Participants	# ED Visit w/ Inpatient Admission	% ED Visit w/ Inpatient Admission	Total Participants	# ED Visit w/ Inpatient Admission	% ED Visit w/ Inpatient Admission
Age Group (Years)						
<1	36,529	1,550	4.2%	35,957	1,222	3.4%
1–2	78,976	2,027	2.6%	78,942	1,635	2.1%
3–9	264,025	2,684	1.0%	262,115	1,949	0.7%
10–18	260,358	3,034	1.2%	293,216	2,741	0.9%
19–39	365,677	19,027	5.2%	436,633	20,453	4.7%
40–64	245,069	23,003	9.4%	282,853	22,814	8.1%
Total	**1,250,634**	**51,325**	**4.1%**	**1,389,716**	**50,814**	**3.7%**
Region**						
Baltimore City	243,110	15,486	6.4%	246,054	14,138	5.7%
Baltimore Suburban	356,556	14,213	4.0%	407,793	14,695	3.6%
Eastern Shore	116,720	4,126	3.5%	128,946	4,167	3.2%
Southern MD	63,610	2,568	4.0%	69,999	2,751	3.9%
Washington Suburban	367,383	10,835	2.9%	421,929	10,922	2.6%
Western MD	100,969	3,976	3.9%	113,796	4,059	3.6%
Out of State	2,286	121	5.3%	1,199	82	6.8%
Total	**1,250,634**	**51,325**	**4.1%**	**1,389,716**	**50,814**	**3.7%**
Managed Care Organization***						
Aetna	N/A			19,167	839	4.4%
Amerigroup	316,549	11,183	3.5%	318,135	9,610	3.0%
Jai Medical Systems	31,313	2,419	7.7%	30,716	1,961	6.4%
Kaiser	10,621	302	2.8%	79,291	1,597	2.0%
Maryland Physicians Care	228,365	9,402	4.1%	251,515	10,453	4.2%
MedStar	77,627	3,693	4.8%	109,641	4,959	4.5%
Priority Partners	281,469	10,436	3.7%	345,883	12,503	3.6%
UnitedHealthcare	273,128	12,341	4.5%	175,139	6,113	3.5%
Univ of MD Health Partners	31,562	1,549	4.9%	60,229	2,779	4.6%
Total	**1,250,634**	**51,325**	**4.1%**	**1,389,716**	**50,814**	**3.7%**
Medicaid Coverage Category***						
Families and Children	788,610	20,415	2.6%	761,333	17,224	2.3%
MCHP	137,877	1,136	0.8%	175,781	1,270	0.7%

Demographic and Coverage Characteristics	CY 2014			CY 2018		
	Total Participants	# ED Visit w/ Inpatient Admission	% ED Visit w/ Inpatient Admission	Total Participants	# ED Visit w/ Inpatient Admission	% ED Visit w/ Inpatient Admission
Disabled	90,421	12,831	14.2%	86,151	10,753	12.5%
ACA Expansion	233,726	16,943	7.2%	366,451	21,567	5.9%
Total	**1,250,634**	**51,325**	**4.1%**	**1,389,716**	**50,814**	**3.7%**

**Regions are defined as the following: Baltimore City (only), Baltimore Metro (Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties), Eastern Shore (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties), Southern Maryland (Calvert, Charles, and St. Mary's Counties), Washington Metro (Montgomery and Prince George's Counties) and Western Maryland (Allegany, Frederick, Garrett, and Washington Counties).
***Participants were assigned to their last recorded MCO and Medicaid coverage category of the calendar year. It is important to consider that the data contained have not been risk-adjusted, meaning that they do not account for variances in risk profiles across MCOs.

Inpatient Admissions

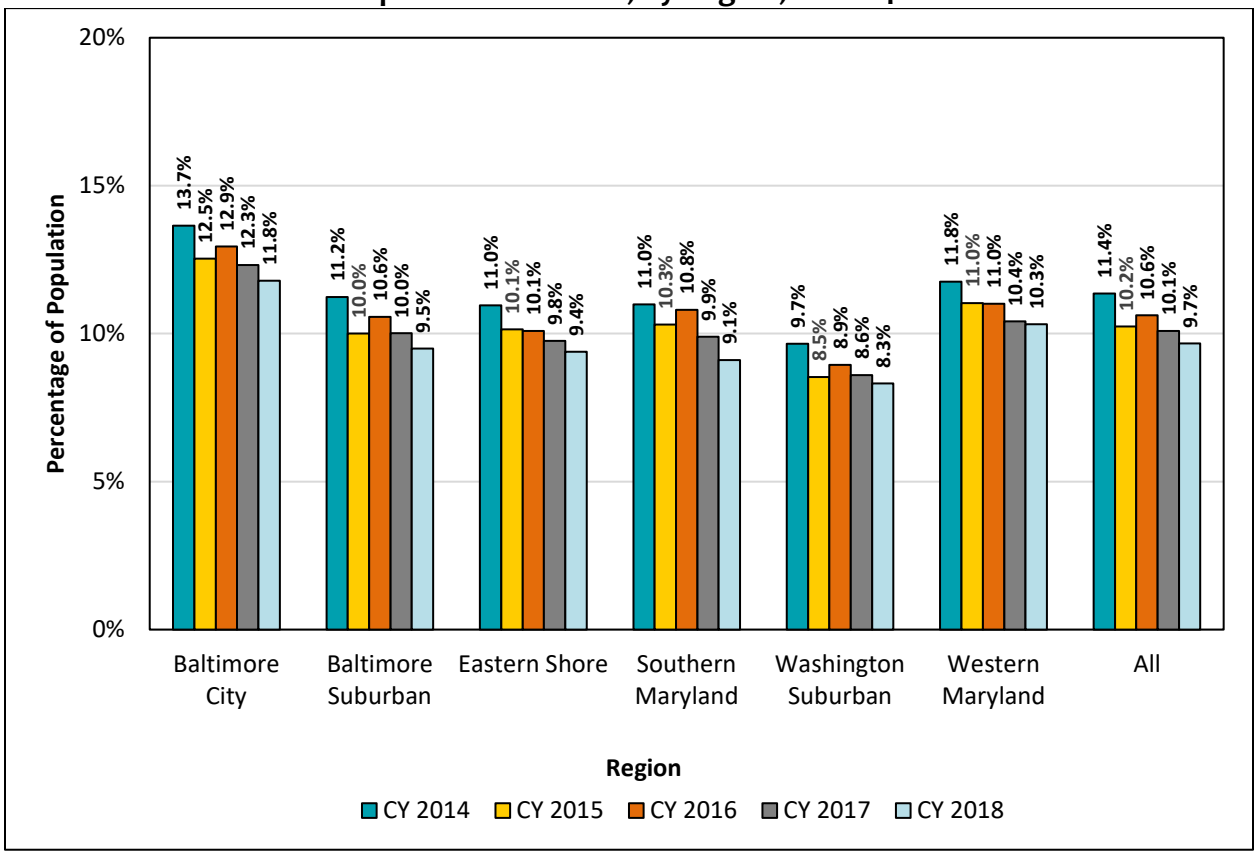
The percentage of participants aged 18 to 64 years with any period of HealthChoice enrollment who had an inpatient admission during the calendar year is one measure used to assess inpatient utilization. Another measure for assessing inpatient utilization is to calculate the average total number of inpatient hospital days or average length of stay, by days. Table 7 presents HealthChoice participants with at least one inpatient hospital admission, by age group, and the average length of stay (LOS) by participant. Participants aged 18 to 40 years had a lower rate of both inpatient admissions and average LOS compared to participants aged 41 to 64 years. Both age groups experienced reductions in inpatient admissions and LOS during the evaluation period.

Table 7. Percentage of HealthChoice Participants Aged 18–64 Years with an Inpatient Admission and Average LOS, by Age Group, CY 2014 and CY 2018

Age Group	All Inpatient Admissions							
	CY 2014				CY 2018			
	Total Participants	# with Inpatient Admission	% with Inpatient Admission	Average Days per Participant	Total Participants	# with Inpatient Admission	% with Inpatient Admission	Average Days per Participant
18–40	402,562	44,275	11.0%	0.7	479,181	44,964	9.4%	0.6
41–64	234,111	28,043	12.0%	1.3	269,031	27,372	10.2%	1.1
Total	**636,673**	**72,318**	**11.4%**	**0.9**	**748,212**	**72,336**	**9.7%**	**0.8**

Figure 10 displays the percentages of HealthChoice participants aged 18 to 64 years with an inpatient admission by region. Between CY 2014 and CY 2018, inpatient admission rates decreased across all regions. In CY 2018, the Washington Suburban region had the lowest admission rate of 8.3 percent, compared to a rate of 9.7 percent in CY 2014. The greatest declines were observed in Baltimore City and Southern Maryland, which both decreased by 1.9 percentage points. Baltimore City and Western Maryland are the only regions whose admission rates remained above 10 percent.

Figure 10. Percentage of HealthChoice Participants Aged 18–64 Years with an Inpatient Admission, by Region, CY 2014–CY 2018



Non-Users of Service

Hilltop identified HealthChoice participants with 12 months of continuous enrollment during the calendar year who did not have any recorded Medicaid FFS claim or MCO encounter during the year. Table 8 presents the proportions of non-users of service by demographic and coverage characteristics for CY 2014 and CY 2018.

Between CY 2014 and CY 2018, the population of Maryland Medicaid participants with 12 months of continuous enrollment grew by 23 percent, from 831,134 to 1,020,028 individuals. Over this period, the proportion of Medicaid participants enrolled for the entire calendar year without an FFS claim or MCO encounter increased slightly—from 6.1 percent in CY 2014 to 7.7 percent in CY 2018. The proportion of non-users was reflected in increases within all demographic and coverage categories.

The increasing trend of individuals who do not use services may reflect enrollment of a greater number of healthy participants who see no need for ambulatory or institutional services. Alternatively, newly-enrolled participants may have not been aware of the benefits available.

Table 8. Proportion of Non-Users within Demographic and Coverage Category of HealthChoice Participants, CY 2014 and CY 2018

Demographic and Coverage Groups	CY 2014		CY 2018	
	Total Number of Participants	Percentage of Non-Users	Total Number of Participants	Percentage of Non-Users
Age Group (Years)				
<1	2,962	0.6%	2,896	0.5%
1–2	58,365	2.3%	58,828	2.3%
3–5	88,381	3.1%	90,565	3.8%
6–9	117,219	3.9%	120,091	4.2%
10–14	120,163	4.9%	143,924	4.8%
15–18	81,111	6.7%	93,375	6.3%
19–20	26,792	11.7%	34,532	11.1%
21–39	185,678	9.0%	266,211	12.8%
40–64	150,463	6.9%	209,606	8.5%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**
Sex				
Female	466,723	4.9%	550,747	5.6%
Male	364,411	7.5%	469,281	10.1%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**
Race/Ethnicity				
Asian	32,609	8.3%	44,704	9.7%
Black	394,858	6.8%	439,382	8.7%
White	243,006	5.5%	279,952	7.3%
Hispanic	99,284	2.8%	87,818	3.5%
Other*	61,377	7.6%	168,172	7.3%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**
Region**				
Baltimore City	168,047	5.7%	191,704	8.1%
Baltimore Suburban	234,994	5.8%	299,183	7.4%
Eastern Shore	79,731	4.3%	96,334	6.2%
Southern Maryland	41,762	6.6%	50,562	8.8%
Washington Suburban	237,369	7.3%	298,351	8.2%
Western Maryland	68,077	5.1%	83,143	6.8%
Out of State	1,154	9.7%	751	16.9%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**
Managed Care Organization***				
Aetna	N/A		4,349	16.2%
Amerigroup	224,268	5.3%	244,827	6.2%
Jai Medical Systems	19,960	7.8%	22,952	10.7%
Kaiser	1,482	9.5%	52,513	11.8%

Demographic and Coverage Groups	CY 2014		CY 2018	
	Total Number of Participants	Percentage of Non-Users	Total Number of Participants	Percentage of Non-Users
Maryland Physicians Care	155,360	6.3%	188,886	7.8%
MedStar	43,473	8.6%	77,465	9.6%
Priority Partners	200,828	4.9%	261,941	6.1%
UnitedHealthcare	173,218	6.5%	129,839	8.1%
Univ of MD Health Partners	12,545	18.5%	37,256	13.8%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**
Medicaid Coverage Group* **				
ACA Expansion	108,686	9.6%	247,468	14.0%
Disabled	78,910	4.8%	78,674	4.9%
Families and Children	544,416	6.0%	562,698	6.4%
MCHP	99,122	3.4%	131,188	3.0%
Total	**831,134**	**6.1%**	**1,020,028**	**7.7%**

*Other race/ethnicity category includes Native Americans, Pacific Islanders/Alaskan, and unknown.
**Regions are defined as the following: Baltimore City (only), Baltimore Suburban (Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties), Eastern Shore (Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties), Southern Maryland (Calvert, Charles, and St. Mary's Counties), Washington Suburban (Montgomery and Prince George's Counties) and Western Maryland (Allegany, Frederick, Garrett, and Washington Counties).
***Participants were assigned to their last recorded MCO and Medicaid coverage category of the calendar year. It is important to consider that the data contained have not been risk-adjusted, meaning that they do not account for variances in risk profiles across MCOs.

Section II Conclusion

Between CY 2014 and CY 2018, managed care enrollment remained consistently above 86.0 percent, with the highest rate of 89.8 percent in CY 2018. Across a wide variety of measures, HealthChoice utilization trends were largely consistent with program goals. The percentage of HealthChoice participants who received ambulatory care increased slightly from CY 2014 to CY 2018. Outpatient ED visits and inpatient admissions generally declined over the evaluation period.

Section III. Quality of Care and Health Promotion

Value-Based Purchasing Program

The Center for Health Care Strategies helped the Department develop a value-based purchasing (VBP) initiative for HealthChoice beginning in 1999. VBP pays incentives to MCOs that demonstrate high-quality care, increased access, and administrative efficiency by using standardized measures of performance on particular population health goals.

VBP measures may change according to the Department's priorities and analysis of changing population health needs. The measures chosen intend to improve outcomes for HealthChoice participants—including children, children with special needs, pregnant women, adults with disabilities, and adults with chronic conditions—while being measurable with available data and comparable to national performance measures for benchmarking. VBP strives for consistency with CMS's national performance measures for Medicaid and should reflect areas that are possible for MCOs to affect change. Measures (Table 9) included in the CY 2018 VBP program are chosen from National Committee for Quality Assurance's (NCQA's) Healthcare Effectiveness Data and Information Set (HEDIS®), using encounter data and data supplied by the HealthChoice MCOs and subsequently validated by the Department's External Quality Review Organization (EQRO) and HEDIS® auditor. Changes in the components of the VBP program may result in changes in plan performance with respect to that measure. Therefore, decisions to make changes to the list of VBP measures are taken with due consideration by the Department.

Table 9. Value-Based Purchasing Measures and Averages across All MCOs,* CY 2018

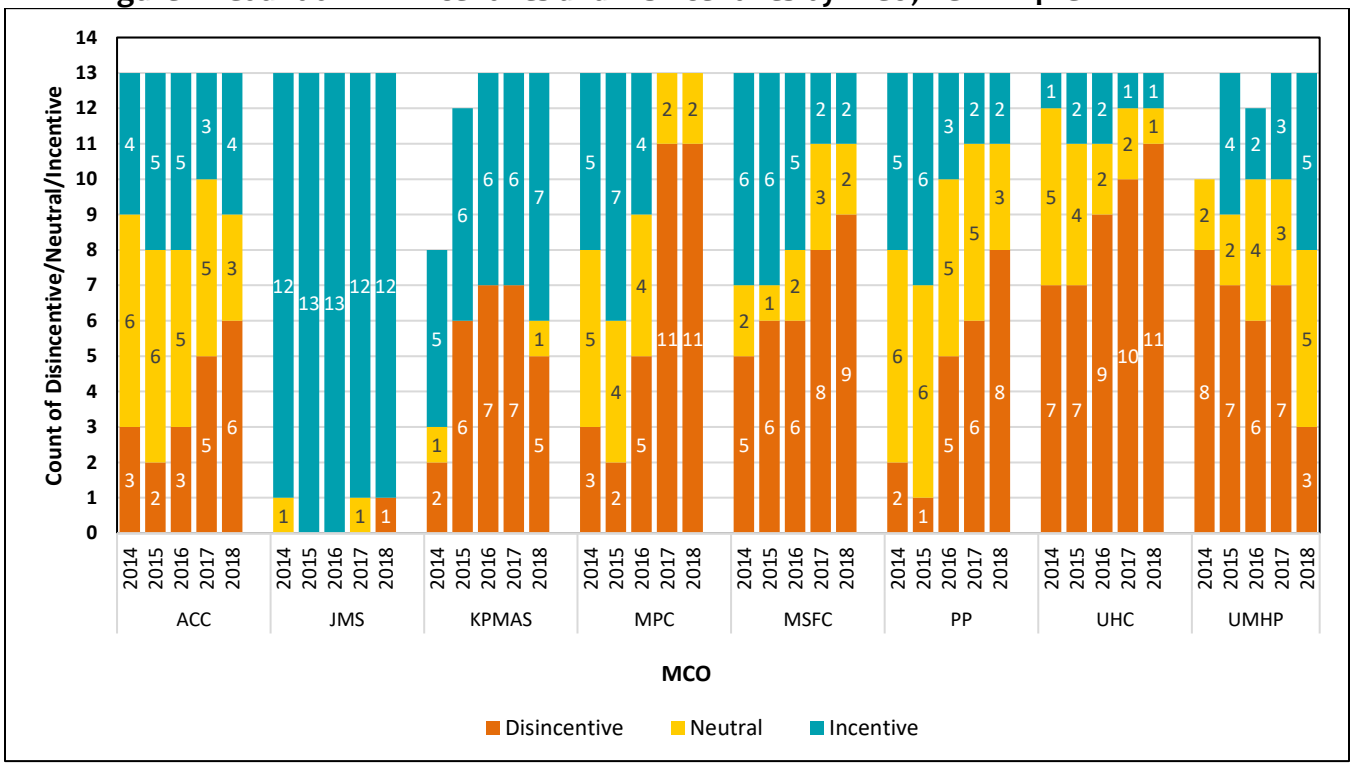
Value-Based Purchasing Measures	Average Percentage Goal Achieved
Adolescent Well-Care Visits	64%
Ambulatory Care Visits for SSI Adults	83%
Ambulatory Care Visits for SSI Children	83%
Adult BMI Assessment	94%
Breast Cancer Screening	69%
Childhood Immunization Status - Combination 3	78%
Comprehensive Diabetes Care - Hba1c testing	88%
Immunization for Adolescents - Combination 1	90%
Lead Screenings for Children - Ages 12-23 months	64%
Controlling High Blood Pressure	61%
Postpartum Care	77%
Asthma Medication Ratio	64%
Well-Child Visits for Children - Ages 3-6	82%

*Aetna started reporting Maryland Medicaid data in CY 2018.
Due to continuous enrollment criteria, Aetna's data were not included in the analysis.

Per regulation,[15] the Department sets aside 1 percent of MCO revenue to generate financial incentives and disincentives to promote performance improvement. Using data on the listed measures collected from the MCOs, the Department identified three levels of performance—incentive, neutral, and disincentive. Each measure is accorded equal weight. Total incentive payments may not exceed the total amount of disincentives collected in the same year, plus any additional funds allocated by the Department for a quality initiative.

Figure 11 indicates how many measures met the incentives and disincentives for each MCO, and those with neutral performances on the VBP measures from CY 2014 to CY 2018. Five of the current VBP measures were introduced beginning in 2014, while 2 previously used measures were dropped, leaving 13 measures on which MCOs were scored. The individual MCOs' measures show mixed results, with some MCOs having consistently high or low performance. However, some plans experienced increases in the number of their disincentive penalties, indicated on the chart in red. Because the incentive and disincentive levels are based on the average of all plans' performance, when plans improve their measures across the board, it increases the standard for earning incentive payments and losing disincentives. Therefore, a decrease in the number of plans earning incentives may reflect the rising standards for care in HealthChoice as a whole. Since HealthChoice typically exceeds the National HEDIS® mean on most measures, VBP targets are usually higher than the national means.

Figure 11. Count of VBP Incentives and Disincentives by MCO,* CY 2014–CY 2018



*ACC: AMERIGROUP Community Care; JMS: Jai Medical Systems; KPMAS: Kaiser Permanente of the Mid-Atlantic States; MPC: Maryland Physicians Care; MSFC: MedStar Family Choice; PP: Priority Partners; UHC: UnitedHealthcare; UMHP: University of Maryland Health Partners. Complete data were not available for KP in 2014 and 2015, and for 2014 and 2016 for UMHP.

[15] COMAR 10.67.04.03.

EPSDT (Healthy Kids) Review

Federal regulations[16] require EPSDT services for all Medicaid participants under the age of 21 years. The purpose of EPSDT is to ensure that children receive age-appropriate physical examinations, developmental assessments, and mental health screenings periodically to identify any deviations from expected growth and development.

Maryland's EPSDT program aims to support access and increase the availability of quality health care. The Department has a Healthy Kids Program, whose nurse consultants certify HealthChoice providers in receiving EPSDT training, support the MCOs, and educate them on new EPSDT requirements. The Healthy Kids Program also collaborates with MCOs to share with their provider networks age-appropriate encounter forms, risk assessment forms, and questionnaires to assist with documenting preventive services according to the Maryland Schedule of Preventive Health Care.

The annual EPSDT (Healthy Kids) review assesses whether EPSDT services are provided to HealthChoice participants in a timely manner. The review is conducted on HealthChoice provider compliance with five EPSDT components: 1) health and developmental history, 2) comprehensive physical exam, 3) laboratory tests/at-risk screenings, 4) immunizations, and 5) health education/anticipatory guidance.

Between CY 2014 and CY 2018, provider compliance increased for all five of the EPSDT components (Table 10). The HealthChoice aggregate total score increased over time during the evaluation period (Qlarant, 2019). All components and the aggregate total remained above the minimum compliance score of 75 percent in CY 2014. In CY 2015, the minimum compliance score increased to 80 percent; the Department achieved this minimum compliance score for all components by CY 2016 and maintained it through CY 2018. MCOs use the review results to develop education efforts to inform participants and providers about EPSDT services.

Table 10. HealthChoice MCO Aggregate Composite Scores for Components of the EPSDT/Healthy Kids Review, CY 2014–CY 2018*

EPSDT Component	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Health and Developmental History	88%	92%	92%	92%	94%
Comprehensive Physical Exam	93%	93%	96%	96%	97%
Laboratory Tests/At-Risk Screenings	76%	78%	85%	82%	87%
Immunizations	83%	84%	85%	90%	93%
Health Education/Anticipatory Guidance	91%	92%	95%	94%	94%
HealthChoice Aggregate Total	**88%**	**89%**	**91%**	**92%**	**94%**

*The minimum compliance score increased to 80 percent in CY 2015.

[16] 42 CFR § 440.345.

Preventive Care

HEDIS® Childhood Measures

The Department uses HEDIS® measures to report childhood immunization status and well-child visit rates. Table 11 presents the immunization and well-child measures for the HealthChoice population. HealthChoice performed above the national HEDIS® mean across all measures from CY 2014 through CY 2018. Childhood Immunization Combination 3, well-child visits for three- to six-year-olds, and well-care visits for adolescents are part of the VBP program.

Table 11. HEDIS® Immunizations and Well-Child Visits: HealthChoice Compared with the National HEDIS® Mean, CY 2014–CY 2018*

HEDIS® Measure	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Childhood Immunization Status: Combination 2					
HealthChoice	76.5%	83.8%	82.2%	78.0%	79.7%
National HEDIS® Mean	+	+	+	+	+
Childhood Immunization Status: Combination 3					
HealthChoice	73.5%	82.1%	80.1%	75.9%	77.4%
National HEDIS® Mean	+	+	+	+	+
Well-Child Visits: 15 Months of Life					
HealthChoice	79.5%	81.8%	82.2%	84.7%	83.6%
National HEDIS® Mean	+	+	+	+	+
Well-Child Visits: 3- to 6-year-olds					
HealthChoice	82.0%	82.7%	81.3%	81.1%	80.1%
National HEDIS® Mean	+	+	+	+	+
Well-Care Visits: Adolescents					
HealthChoice	62.1%	65.6%	64.6%	64.2%	61.6%
National HEDIS® Mean	+	+	+	+	+

*Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

Childhood Lead Testing

The Department is a member of Maryland's Lead Poisoning Prevention Commission, which advises Maryland executive agencies, the General Assembly, and the Governor on lead poisoning prevention in the state. Maryland's plan to reduce childhood lead poisoning includes ensuring that young children receive appropriate lead risk screening and blood lead testing. The Department's 2017 Joint Chairmen's Report describes its efforts through several initiatives (Maryland Department of Health, 2017).

As part of the EPSDT benefit, Medicaid requires that all children receive a blood lead test at 12 and 24 months of age. The Department measures the blood lead testing rates for children aged 12 through 23 months and 24 through 35 months who are enrolled continuously in the same

MCO for at least 90 days. A child's lead test must have occurred during the calendar year or the year prior.

The Department provides each MCO with monthly reports on children who received blood lead tests and those found to have elevated blood lead levels to ensure that these children receive appropriate follow-up, which can include case management services and home environmental lead testing. In addition to complying with the EPSDT mandate for blood lead testing, the Department also includes blood lead testing measures in several of its quality assurance activities, including the VBP and Managing for Results (MFR) programs (Maryland Department of Health, n.d.a).[17]

In 2012, the Centers for Disease Control and Prevention (CDC) issued the recommendation to 1) remove the "level of concern" language from 10 micrograms per deciliter and replace it with the "reference level" of five micrograms per deciliter, and 2) require statewide testing of all children. Maryland adopted these recommendations for all children born on or after January 1, 2015. Table 12 presents the percentage of children aged 12 to 23 months and 24 to 35 months who received at least one lead test during the calendar year or the prior year. The rates of lead testing for both age groups increased over the five-year evaluation period.

Table 12. Percentage of HealthChoice Children Aged 12–23 and 24–35 Months Who Received a Lead Test During the Calendar Year or the Prior Year, CY 2014–CY 2018

Age Group (Months)	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
12–23	59.9%	60.7%	60.7%	62.7%	62.2%
24–35	75.6%	77.6%	78.3%	80.4%	80.8%

In both CY 2014 and CY 2018, over 50,000 children in HealthChoice aged zero to six years received a lead test as reported to the Maryland Department of the Environment (MDE) Childhood Lead Registry (CLR). Table 13 presents the number of children in CY 2014 and CY 2018, as well as the number and percentage of those children who had an elevated blood lead level, defined as greater than or equal to five micrograms per deciliter. The percentage of children aged zero to six years with elevated blood lead level decreased from 3.3 percent in CY 2014 to 2.4 percent in CY 2018.

Table 13. HealthChoice Children Aged 0–6 Years with an Elevated Blood Lead Level, CY 2014 and CY 2018

Calendar Year	Number of Children with a Lead Test	Children with an Elevated Blood Lead Level (≥5µg/dL)	
		#	%
2014	53,426	1,744	3.3%
2018	54,073	1,293	2.4%

[17] The lead testing measures count lead tests reported through Medicaid administrative data and the Childhood Lead Registry, which is maintained by the Maryland Department of the Environment.

HPV Vaccine for Adolescents

The Department has increased efforts to vaccinate adolescents against human papillomavirus (HPV). According to the CDC (2015a), about 14 million people, including teens, are infected with HPV each year, posing a significant public health risk. The CDC (2016) now recommends that 11- to 12-year-olds receive two doses of the HPV vaccine—rather than the previously recommended three doses—to protect against cancers caused by HPV. HPV is a common virus that spreads by sexual contact and can cause cervical cancer in women and penile cancer in men. HPV can also cause anal cancer, throat cancer, and genital warts in both men and women (CDC, 2015b).

Administering widespread vaccinations for HPV will potentially reduce the number of cervical cancer cases drastically. In 2014, for the first time, the HEDIS® HPV vaccination measure assessed the percentage of 13-year-old females who received three doses of the HPV vaccine by their 13th birthday.[18] Beginning in CY 2016, HPV was added as a component of the measure of immunization for adolescents rather than as a standalone measure and included both females and males. In alignment with the recommendations from the CDC, the measure was updated in CY 2017 to reduce the requirement from three doses of HPV vaccine to two doses.

In CY 2014, 19.2 percent of adolescents (females and males[19]) received two HPV vaccine doses[20] between their 9th and 13th birthdays (Table 14). In CY 2018, that rate increased to 33.7 percent, an increase of by 14.5 percentage points. The Federal Advisory Committee on Immunization Practices (ACIP) recommends vaccination for adolescents, but it is not a requirement. All ACIP-recommended vaccines are provided at no cost to the state by the federal government.

Table 14. HPV Vaccination Rates, 13-Year-Old Medicaid Participants, CY 2014–CY 2018

Calendar Year	Medicaid Participants who Turned 13 Years Old	Two HPV Vaccine Doses between 9th and 13th Birthdays	
	Number	Number	Percentage
2014	28,285	5,427	19.2%
2015	28,329	6,443	22.7%
2016	27,579	7,763	28.1%
2017	29,683	9,288	31.3%
2018	31,194	10,504	33.7%

[18] The HPV vaccine is recommended for both males and females, although the HEDIS measure focused exclusively on females until CY 2016. Other state initiatives, including Healthy People 2020, track vaccination for both males and females at an older age, from 13 to 15 years of age.

[19] The HEDIS measure used as a basis for this measure was updated in CY 2016 to include both females and male participants, and was updated in CY 2017 to allow for two rather than three vaccinations. The measure was revised and changes were applied to all years in the measurement period. The minimum amount of time between the two doses of the vaccine has been corrected to at least 146 days apart.

Breast Cancer Screening

Breast cancer is the most prevalent type of cancer among women (U.S. Cancer Statistics Working Group, 2019). In Maryland, the breast cancer incidence rate was 128.6 cases per 100,000 women, compared to the 124.2 cases per 100,000 women nationally (U.S. Cancer Statistics Working Group, 2019). When detected early, breast cancer is easier to treat and women have a greater chance of survival (CDC, 2014). Mammograms are the most effective technique for early detection of breast cancer.

Table 15 demonstrates a 2.6 percentage point increase in the percentage of female HealthChoice participants who received a mammogram for breast cancer screening from CY 2014 to CY 2018 (MetaStar, Inc., 2019). Maryland performed above the national HEDIS® mean for the entire evaluation period. The addition of breast cancer screening to the VBP program in CY 2014 may have increased the screening rate.

Table 15. Percentage of Women in HealthChoice Aged 50–64 Years Who Had a Mammogram for Breast Cancer Screening, Compared with the National HEDIS® Mean, CY 2014–CY 2018*

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Maryland Percentage	67.9%	70.0%	69.8%	69.7%	69.3%
National HEDIS® Mean**	+	+	+	+	+

Note: Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

*The HealthChoice averages in CYs 2014, 2015, and 2017 were influenced by the inclusion of HEDIS® rates from newer MCOs.

**The national HEDIS® mean is based on an assessment of women aged 50 to 74 years.

Cervical Cancer Screening

Cervical cancer is preventable and treatable. The CDC recommends cervical cancer screenings for women starting at age 21 (CDC, n.d.a). According to the National Cancer Institute (NCI) (n.d.), women aged 21 to 29 years should be screened with a Papanicolaou (Pap) test every three years. Women aged 30 to 65 years can then be screened every five years with Pap and HPV co-testing, or every three years with a Pap test alone. Women with certain risk factors may need to have more frequent screening or continue screening beyond age 65 years.

Table 16 presents the percentage of women aged 21 to 64 years in HealthChoice who received a cervical cancer screening in CY 2014 through CY 2018, a decrease of 3.6 percentage points. Despite this decline, HealthChoice performed above the national HEDIS® mean throughout the evaluation period.

Table 16. Percentage of Women in HealthChoice Aged 21–64 Years Who Had a Cervical Cancer Screening, Compared with the National HEDIS® Mean, CY 2014–CY 2018*

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Maryland Percentage	65.8%	65.1%	64.9%	62.4%	62.2%
National HEDIS® Mean**	+	+	+	+	+

*HealthChoice averages in CYs 2014, 2015, and 2017 were influenced by the inclusion of HEDIS® rates from newer MCOs.
**Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean. *

Colorectal Cancer Screening

According to the U.S. Cancer Statistics Working Group (2019), colorectal cancer is one of the most common cancers in both men and women. In the U.S. and in Maryland, colorectal cancer is the fourth most commonly diagnosed cancer, as well as the fourth-leading cause of cancer mortality as of 2016. Maryland's rank in overall cancer mortality has been steadily improving compared to other states and the District of Columbia (Maryland Department of Health, n.d.a). Between 2008 and 2012, colorectal cancer was the third-leading cause of cancer mortality in Maryland; between 2012 and 2016, it dropped to the fourth-leading cause of mortality (Maryland Department of Health, n.d.b). Screening tests find precancerous polyps that can be removed before they become cancerous (CDC, 2018a). The expansion of Medicaid coverage to childless adults and additional parents and caretakers under the ACA removed a major access barrier for age-eligible adults with low income to be screened for colorectal cancer.

Table 17 shows the percentage of HealthChoice participants who received at least one of three appropriate colorectal cancer screenings—fecal occult blood test (FOBT), flexible sigmoidoscopy, or colonoscopy—during the study period.[21] The colorectal cancer screening rate increased by 8.6 percentage points between CY 2014 and CY 2018.

Table 17. Percentage of HealthChoice Participants Aged 50–64 Years Who Had a Colorectal Cancer Screening, CY 2014–CY 2018

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Percentage of HealthChoice Participants	32.1%	35.0%	37.2%	39.0%	40.7%

[21] HEDIS defines an appropriate screening as follows: an FOBT during the measurement year, a flexible sigmoidoscopy during the measurement year or the prior four years, a colonoscopy during the measurement year or the prior nine years, a CT colonography during the measurement year or the prior four years, and a FIT-DNA test during the measurement year or the prior two years. Only participants who met the HEDIS eligibility requirements were included in the population for this measure. These participants were enrolled continuously in Medicaid during the calendar year and the preceding calendar year. Participants must have been enrolled as of the last day of the measurement year and could not have more than one gap of enrollment exceeding 45 days during each year of continuous enrollment. The group of newly enrolled ACA participants did not have the full length of time to complete screenings compared to participants who had been eligible for HealthChoice for a longer period. Additionally, the measure was modified in CYs 2016 and 2017 to include additional procedures that were not included in previous years.

Dental Services

The Maryland Medicaid program covers dental benefits through the Maryland Healthy Smiles Dental Program. Dental services are covered for children aged 20 and younger under EPSDT, pregnant women, adults in the REM program, and former foster care youth (see Section VII) until they turn 26. Non-pregnant adults may receive dental benefits provided as an additional benefit of their MCO. As of January 2020, all MCOs voluntarily covered limited adult dental services to their members as a part of their benefit package using their own revenues. In addition, on June 1, 2019, the Department implemented an adult dental pilot for adults aged 21 through 64 years who are enrolled in both Medicare and Medicaid. This is a limited benefit when compared to the full benefit of the Healthy Smiles Program.

Maryland continues to improve its dental program by confronting barriers to providing comprehensive oral health services to Medicaid participants. This evaluation includes a selection of key measures from the 2019 Annual Oral Health Legislative Report prepared by the Maryland Department of Health (2020). The Medicaid program delivered oral health services to 504,533 children and adults (aged 0 to 64) during CY 2018—up from 493,146 in CY 2017 (Maryland Department of Health, 2020). In CY 2018, 69.1 percent of children received dental services, which is greater than the national HEDIS® mean (Maryland Department of Health, 2020). Table 18 shows the number of dentists that billed for services in CY 2018.

Table 18. Number of Dentists Participating in Medicaid Who Billed One or More Services in CY 2018

Region*	CY 2018
Baltimore Metro	593
Montgomery/Prince George's County	582
Southern Maryland	66
Western Maryland	152
Eastern Shore	100
Other	219
Total**	**1,712**
Unique Total***	**1,596**

*Baltimore Metro includes Baltimore City and Anne Arundel, Baltimore, Carroll, Harford, and Howard Counties. Southern Maryland includes Calvert, Charles, and St. Mary's Counties. Western Maryland includes Allegany, Frederick, Garrett, and Washington Counties. The Eastern Shore includes Caroline, Cecil, Dorchester, Kent, Queen Anne's, Somerset, Talbot, Wicomico, and Worcester Counties.
**Please note that the total is the sum of all regions.
***Please note that the unique total does not equal the sum of all regions because an individual dentist may have offices in multiple regions. The unique total reflects the number of unique dentists unduplicated statewide. This unique total also includes out-of-state dentists who served Maryland Medicaid enrollees.

Table 19 on the following page displays the dental service utilization rate for children aged 4 to 20 years. The number of children receiving at least one dental service increased from 67.7 percent in CY 2014 to 69.1 percent in CY 2018.

Table 19. Number and Percentage of Children Aged 4–20 Years Enrolled in Medicaid* for at Least 320 Days Who Received a Dental Service, CY 2014–CY 2018

Calendar Year	Total Number of Children	Children Receiving at Least One Dental Service	Percentage Receiving a Dental Service
2014	423,625	286,713	67.7%
2015	404,118	278,796	69.0%
2016	440,100	301,367	68.5%
2017	464,585	316,294	68.1%
2018	469,413	324,252	69.1%

*The study population for CY 2014 through CY 2018 measured dental utilization for all qualifying individuals in Maryland's Medicaid (Medical Assistance) program, including FFS and HealthChoice MCO enrollees. The following coverage groups were excluded from the analysis: X02, W01, and P10.

Table 20 displays the number and percentage of children aged 4 to 20 years who were enrolled in Medicaid for at least 320 days and received dental services in CY 2018. Overall, 69.1 percent received any dental service, 67.4 percent received diagnostic services, 63.6 percent received preventative services, and 22.9 percent received restorative services. Children aged six to nine years had the highest dental utilization rate across all types of service, while children aged 19 to 20 years had the lowest rate in CY 2018.

Table 20. Number and Percentage of Children Aged 4–20 Years Enrolled in Medicaid* for at Least 320 Days Who Had Dental Visits, by Age Group and Type of Service, CY 2018

Age Group (Years)	Total Number of Participants	Number with Any Service	Percentage with Any Service	Percentage with Diagnostic Service	Percentage with Preventative Service	Percentage with Restorative Service
4–5	62,157	45,003	72.4%	71.6%	67.7%	20.2%
6–9	124,559	94,606	76.0%	74.9%	71.2%	27.6%
10–14	149,158	107,652	72.2%	70.5%	67.2%	21.9%
15–18	97,245	60,782	62.5%	59.6%	55.6%	22.6%
19–20	36,294	16,209	44.7%	42.4%	37.6%	17.1%
Total	**469,413**	**324,252**	**69.1%**	**67.4%**	**63.6%**	**22.9%**

*The study population for CY 2018 measured dental utilization for all qualifying individuals in Maryland's Medical Assistance program, including FFS and HealthChoice MCO enrollees. The following coverage groups were excluded from the analysis: X02, W01, and P10.

Dental care is also a benefit for pregnant women. Table 21 presents the percentage of pregnant women aged 21 years and older enrolled in Medicaid for at least 90 days who received at least one dental service in each year. Dental service utilization fluctuated over the study period. Ultimately, the rate of dental utilization reached its highest level in CY 2018 at 28.2 percent.

Table 21. Number and Percentage of Pregnant Women Aged 21+ Years with at Least 90 Days in Medicaid* Who Received a Dental Service, CY 2014–CY 2018

Calendar Year	Total Number of Participants	Number of Participants with at Least One Visit	Percentage with Dental Visits
2014	25,408	6,858	27.0%
2015	26,795	7,324	27.3%
2016	29,014	7,562	26.1%
2017	29,111	7,981	27.4%
2018	28,259	7,979	28.2%

*The study population for CY 2014 through CY 2018 included all qualifying pregnant women in Maryland's Medical Assistance program, including FFS and HealthChoice MCO enrollees. The following coverage groups were excluded from the analysis: X02, W01, and P10.

Maternal Health and Reproductive Health

The Department and the HealthChoice MCOs engage pregnant women in care through individualized outreach, community events, and prenatal case management. HealthChoice participants identified as pregnant are qualified as a Special Needs Population under Code of Maryland Regulations (COMAR) 10.67.04.08. This requires that they receive timely access to care as well as informational materials, dental benefits, and other resources. The Department also operates a dedicated help line for pregnant women. Women who contact the help line are referred to Medicaid-funded Administrative Care Coordination Units (ACCUs) at the local health departments. The ACCUs connect HealthChoice participants to both their MCOs and other services, such as dental services and local home-visiting programs.

Timeliness of Prenatal Care

Early prenatal care is linked to better health outcomes for the mother and child overall. Table 22 assesses the percentage of deliveries for which the mother received a prenatal care visit in the first trimester or within 42 days of HealthChoice enrollment for CY 2014 through CY 2018 (MetaStar, Inc., 2019). HealthChoice outperformed the national HEDIS® mean each year.

Table 22. HEDIS® Timeliness of Prenatal Care, HealthChoice Compared with the National HEDIS® Mean, CY 2014–CY 2018*

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Percentage of Deliveries in which the Mother Received a Prenatal Care Visit in the 1st Trimester or within 42 days of HealthChoice Enrollment	82.8%	84.4%	87.6%	84.9%	86.1%
National HEDIS® Mean	+	+	+	+	+

*The HealthChoice averages in CYs 2014, 2015, and 2017 were influenced by the inclusion of HEDIS® rates from newer MCOs.

**Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

Frequency of Ongoing Prenatal Care

The Department measures the frequency of ongoing prenatal care to assess MCO performance in providing appropriate prenatal care.[22] For the first part of the measure—the percentage of women who received more than 80 percent of expected prenatal visits—higher scores are preferable. For the second part of the measure—women who received less than 21 percent of expected prenatal visits—lower scores are preferable. Maryland consistently outperformed the national HEDIS® means for both aspects of this measure. See Table 23. This measure was retired by HEDIS® in CY 2017.

Table 23. Percentage of HealthChoice Deliveries Receiving the Expected Number of Prenatal Visits (≥ 81 Percent or < 21 Percent of Recommended Visits), Compared with the National HEDIS® Mean, CY 2014–CY 2016*

	CY 2014		CY 2015		CY 2016	
	MD	National	MD	National	MD	National
Greater than or equal to 81% of Expected Prenatal Visits	64.9%	+	67.9%	+	71.0%	+
Less than 21% of Expected Prenatal Visits**	8.2%	+	6.1%	+	5.0%	+

* The HealthChoice averages in CYs 2014 and 2015 were influenced by the inclusion of HEDIS® rates from newer MCOs. Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

** This measure is an inverse measure; a lower calculated performance rate for measures, which indicates better clinical care or control. A "+" means that the rate is below the national HEDIS® mean.

Contraceptive Care

Contraception is a highly effective clinical preventive service that can help women achieve their personal health goals, including preventing teen and unintended pregnancies, as well as achieving healthy spacing of births. The U.S. Department of Health and Human Services, Office of Population Affairs (OPA) has developed contraceptive care measures that assess the provision of contraception to women aged 15–44 years (OPA, n.d.a).

Table 24 presents the percentage of women at risk of unintended pregnancy that are provided the following methods of contraception (OPA, n.d.b):

1. Most effective contraception: female sterilization, hormonal implants, intrauterine devices or systems (IUD/IUS)

[22] The American College of Obstetricians and Gynecologists recommends a visit once every four weeks during the first 28 weeks of pregnancy, once every two to three weeks during the next seven weeks, and weekly for the remainder of the pregnancy, for a total of 13 to 15 visits.

2. Moderately effective contraception: oral pills, injectables, patch, ring, or diaphragm

The table includes women enrolled in HealthChoice aged 15 to 44 as of the end of that calendar year who had no more than one gap in Medicaid enrollment of up to 45 days during the year. The percentage of women enrolled in HealthChoice with at least one type of contraception classified as most effective increased from 6.5 percent in CY 2014 to 7.6 percent in CY 2018. The percentage of women enrolled in HealthChoice with at least one moderately effective type of contraception decreased from 26.5 percent in CY 2014 to 23.1 percent in CY 2018.

Table 24. Contraceptive Care Rates, Women Enrolled in HealthChoice Aged 15–44 Years, CY 2014–CY 2018

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Percentage receiving most effective contraception	6.5%	7.1%	7.3%	7.5%	7.6%
Percentage receiving moderately effective contraception	26.5%	24.5%	26.6%	24.8%	23.1%
Number of HealthChoice women at risk of unintended pregnancy	212,603	212,613	233,305	251,210	264,779

Section III Conclusion

Although many of the HealthChoice performance measures in this report demonstrate quality of health care already delivered, two particular HealthChoice programs focus more directly on improving specific quality of care measures.

First, the VBP program incentivizes MCOs to maintain and improve performance by adjusting a portion of their payments according to their scores on measures of clinical outcomes and care delivery defined in advance upon which MCOs should act. Performance by all the MCOs sets standards by which each MCO is evaluated, and those MCOs that exceed a performance threshold receive enhance incentive payments. MCOs whose performance is less than the standard receive disincentive payments. Although MCOs may vary with respect to which measures earn them incentive payments and which create disincentive penalties, the VBP program on the whole supports quality improvement across the HealthChoice population.

Second, the EPSDT annual review assesses plan performance on services to children under age 21. Because EPSDT services are a national requirement for Medicaid, and the EPSDT review measures whether all HealthChoice plans achieve minimum levels of performance in delivering EPSDT, results from the most recent review show the plans meeting or exceeding standards across the board.

The HealthChoice program also focuses on providing a variety of preventive services to participants. Over the evaluation period, many performance measures improved, such as breast cancer screening rates, rates for well-child visits, well-care visits, immunizations, and blood lead

screening rates. In addition, the percentage of pregnant women who received prenatal services in a timely manner increased from CY 2014 to CY 2018.

Section IV. Provide Patient-Focused Comprehensive and Coordinated Care through Provision of a Medical Home

The HealthChoice demonstration's medical home provision provides patient-focused, comprehensive, and coordinated care for its participants by providing each member with a single "medical home" through a PCP. A medical home encourages HealthChoice participants to use appropriate care settings and decrease potentially inappropriate or avoidable utilization of health services. To this end, HealthChoice participants are asked to select an MCO and PCP to oversee their medical care. HealthChoice participants who do not select an MCO or PCP are assigned to one.

This section of the report assesses how adequately HealthChoice provides participants with a medical home and educates them as to their use. The measures analyze appropriate service utilization and participants' ability to connect with their medical homes. Understanding the resources available to them, participants should seek care in an ambulatory care setting before resorting to seeking care in the ED or allowing a condition to progress to the extent that it warrants an inpatient admission.

Medical Home Utilization

In December 2015, the Department began collecting information from MCOs on HealthChoice participants' PCP assignment, as well as information on the PCPs within a group practice. This information helps the Department track whether participants visited their assigned PCPs or whether they are using other providers to oversee their medical care and provide a medical home.

Table 25 presents the number of participants who had at least one visit with their assigned PCP, their assigned PCP's group practice or partner PCP, or any PCP in the MCO's network from CY 2016 to CY 2018. This section presents these measures by MCO for HealthChoice participants with 12 months of enrollment in an MCO. Participants enrolled for 12 continuous months provide an MCO with enough time to intervene in their health care.

During the evaluation period, all MCOs except MedStar and Priority Partners experienced slight declines in the proportions of their HealthChoice participants with at least one visit to their assigned PCP. All MCOs experienced increases in the proportion of their participants with at least one visit to any PCP within the MCO network. In CY 2018, the proportion of continuously enrolled participants who had at least one visit with their assigned PCP ranged from 23.2 percent (Priority Partners) to 62.3 percent (Kaiser). When the medical home was defined to include all PCPs within the MCO network, all of the MCOs except for Aetna saw that over 70 percent of their participants had a visit to any PCP within their provider network.

Table 25. Percentage of HealthChoice Participants (12 Months of Enrollment) with a PCP Visit, by MCO*, CY 2016–CY 2018

MCO	# of Participants (12 Months of Enrollment)	% of Participants with a Visit with their Assigned PCP	% of Participants with a Visit with Assigned PCP, Group Practice, or Partner PCPs	% of Participants with a Visit with any PCP in MCO's Network
CY 2016				
Amerigroup	172,839	48.3%	65.7%	75.5%
Jai Medical Systems	15,056	38.9%	68.2%	77.5%
Kaiser	18,449	63.0%	67.2%	67.7%
Maryland Physicians Care	129,463	38.1%	60.4%	71.6%
MedStar	44,200	25.1%	32.4%	69.3%
Priority Partners**	172,615	8.4%	8.5%	68.8%
UnitedHealthcare	119,968	46.3%	62.0%	74.9%
University of MD Health Partners	18,875	33.0%	50.3%	62.7%
Total	**691,465**	**34.4%**	**47.3%**	**72.1%**
CY 2017				
Amerigroup	212,537	47.2%	66.4%	74.6%
Jai Medical Systems	19,502	31.6%	64.4%	73.8%
Kaiser	38,888	57.6%	63.0%	63.5%
Maryland Physicians Care	163,805	36.1%	58.7%	69.0%
MedStar	60,897	32.9%	49.0%	67.7%
Priority Partners	220,219	22.8%	25.0%	67.5%
UnitedHealthcare	120,463	44.9%	60.6%	73.5%
University of MD Health Partners	26,709	30.4%	47.0%	60.5%
Total	**863,078**	**37.1%**	**51.5%**	**70.1%**
CY 2018				
Aetna***	1,504	0.7%	1.3%	4.7%
Amerigroup	214,350	46.3%	66.2%	83.4%
Jai Medical Systems******	20,148	****	56.5%	79.5%
Kaiser	44,640	62.3%	67.5%	72.0%
Maryland Physicians Care	164,748	35.8%	56.9%	76.8%
MedStar	65,480	35.5%	54.7%	74.4%
Priority Partners	227,405	23.2%	25.4%	79.5%
UnitedHealthcare	114,013	41.8%	55.5%	76.5%
University of MD Health Partners	30,257	31.2%	47.3%	71.4%
Total	**882,545**	**30.9%**	**47.9%**	**68.7%**

* The number of participants in a HealthChoice MCO only includes participants who were listed in the data files provided by the MCO and also in the MCO enrollment files according to MMIS2 data.

** Please read Priority Partners' results with caution as our analysis relied heavily on National Provider Identifiers (NPIs), and Priority's files had missing NPIs.

***Aetna had no participants who were enrolled in CY 2017 for 12 months. Aetna started reporting Maryland Medicaid data in CY 2018.

****The percentage of participants with a visit to their assigned PCP is not reported for Jai because the use of the billing NPI limits ability to capture a participant's assigned PCP.

Table 26 shows the proportion of participants who received at least one ambulatory care visit by MCO in CY 2014 and CY 2018. The total number of participants enrolled in HealthChoice grew by 11.1 percent between CY 2014 and CY 2018, while the proportion receiving an ambulatory care visit remained relatively stable at just over 77 percent. There was considerable variation in this measure among MCOs. Four out of eight MCOs operating in CY 2014 and four out of nine MCOs in CY 2018 had at least 75 percent of participants completing an ambulatory care visit in both years.

Table 26. Percentage of HealthChoice Participants Aged 0–64 Years with an Ambulatory Care Visit, by MCO, CY 2014 and CY 2018

MCO*	CY 2014			CY 2018		
	Total Participants	# with Ambulatory Care Visit	% with Ambulatory Care Visit	Total Participants	# with Ambulatory Care Visit	% with Ambulatory Care Visit
Aetna	N/A**			19,167	9,753	50.9%
Amerigroup	316,549	251,103	79.3%	318,135	257,404	80.9%
Jai Medical Systems	31,313	21,689	69.3%	30,716	22,353	72.8%
Kaiser	10,621	5,544	52.2%	79,291	56,974	71.9%
Maryland Physicians Care	228,365	177,067	77.5%	251,515	194,308	77.3%
MedStar	77,627	55,124	71.0%	109,641	80,141	73.1%
Priority Partners	281,469	228,899	81.3%	345,883	280,222	81.0%
UnitedHealthcare	273,128	209,426	76.7%	175,139	134,974	77.1%
University of Maryland Health Partners	31,562	17,563	55.6%	60,229	40,315	66.9%
ALL MCOs	**1,250,634**	**966,415**	**77.3%**	**1,389,716**	**1,076,444**	**77.5%**

*It is important to consider that the data contained have not been risk-adjusted, meaning that they do not account for variances in risk profiles across MCOs.
**N/A = not applicable (i.e., the MCO did not participate in HealthChoice during the given year).

Table 27 displays the ED utilization of HealthChoice participants aged 0 to 64 years by MCO during CY 2014 and CY 2018. There were eight MCOs actively participating in HealthChoice in CY 2014 and nine in CY 2018. Between CY 2014 and CY 2018, all but two MCOs experienced a decrease in the percentage of participants with an ED visit; Kaiser Permanente and the University of Maryland Health Partners experienced an increase in ED use by 0.6 and 3.0 percentage points, respectively. In CY 2014, at least 30 percent of participants in five of the eight MCOs used ED services. However, by CY 2018, only three out of nine MCOs had an ED utilization rate greater than 30 percent.

Table 27. Percentage of HealthChoice Participants Aged 0–64 with an Outpatient ED Visit, by MCO, CY 2014 and CY 2018*

MCO*	CY 2014			CY 2018		
	Total Participants	# with ED Visit	% with ED Visit	Total Participants	# with ED Visit	% with ED Visit
Aetna	N/A**			19,167	4,171	21.8%
Amerigroup	316,549	98,589	31.1%	318,135	68,993	21.7%
Jai Medical Systems	31,313	12,700	40.6%	30,716	10,534	34.3%
Kaiser	10,621	1,443	13.6%	79,291	11,281	14.2%
Maryland Physicians Care	228,365	80,778	35.4%	251,515	78,801	31.3%
MedStar	77,627	22,837	29.4%	109,641	31,988	29.2%
Priority Partners	281,469	92,320	32.8%	345,883	104,330	30.2%
UnitedHealthcare	273,128	85,514	31.3%	175,139	48,541	27.7%
University of Maryland Health Partners	31,562	8,152	25.8%	60,229	17,332	28.8%
ALL MCOs	**1,250,634**	**402,333**	**32.2%**	**1,389,716**	**375,971**	**27.1%**

*It is important to consider that the data contained have not been risk-adjusted, meaning that they do not account for variances in risk profiles across MCOs.
**N/A = not applicable (i.e., the MCO did not participate in HealthChoice during the given year).

Appropriateness of ED Care

A fundamental goal of managed care programs such as HealthChoice is the delivery of the appropriate care at the appropriate time in the appropriate setting. One widely used methodology to evaluate progress toward appropriate ED utilization is based on classifications developed by researchers at the New York University (NYU) Center for Health and Public Service Research (Billings, Parikh, & Mijanovich, 2000). The original algorithm was created with ICD-9 codes as of 2001 and was not revised to incorporate new ICD-9 and ICD-10 codes that were added each year. Over time, this resulted in an increase in the percentage of unclassified ED visits. As a result, researchers revised the algorithm with the updated ICD-9 and ICD-10 codes to decrease the number of unclassified ED visits (Johnston, Allen, Melanson, & Pitts, 2017). Hilltop has not yet applied this update for classifying ED visits. According to Billings et al. (2000), the ED profiling algorithm categorizes emergency visits as follows:

1. *Non-emergent*: Immediate care was not required within 12 hours based on the patient's presenting symptoms, medical history, and vital signs.
2. *Emergent but primary care treatable*: Treatment was required within 12 hours, but it could have been provided effectively in a primary care setting (e.g., CAT scan or certain lab tests).
3. *Emergent but preventable/avoidable*: Emergency care was required, but the condition was potentially preventable/avoidable if timely and effective ambulatory care had been accessible and received during the episode of illness (e.g., asthma flare-up).

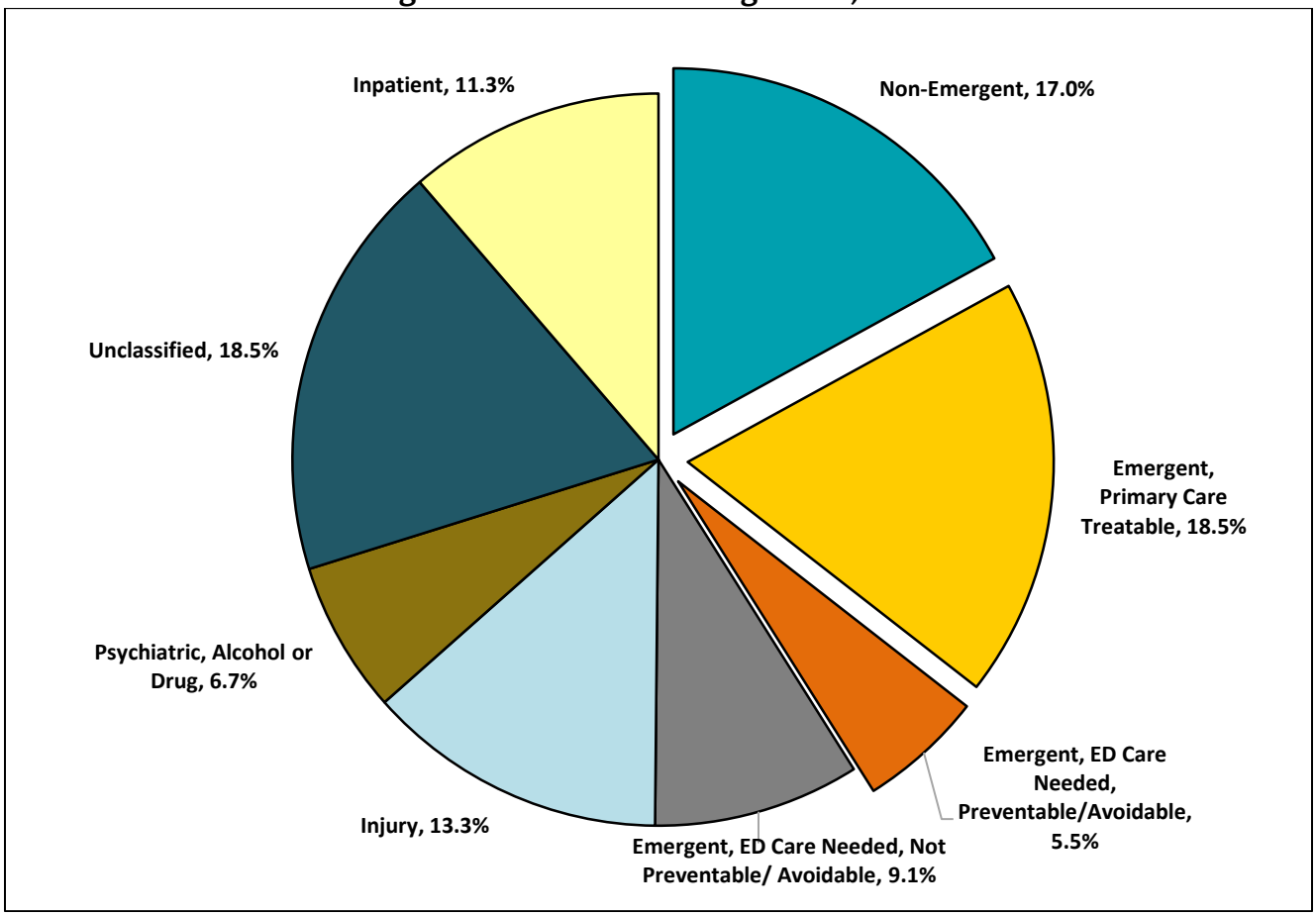
4. *Emergent, ED care needed, not preventable/avoidable*: Ambulatory care could not have prevented the condition (e.g., trauma or appendicitis).
5. *Injury*: Injury was the principal diagnosis.
6. *Alcohol-related*: The principal diagnosis was related to alcohol.
7. *Drug-related*: The principal diagnosis was related to drugs.
8. *Mental health-related*: The principal diagnosis was related to mental health.
9. *Unclassified*: The condition was not classified in one of the above categories by the expert panel.

ED visits that fall into the first three categories above may indicate problems with access to primary care, including access during non-traditional work hours. Figure 12 presents the distribution of all CY 2018 ED visits by NYU classification for individuals with any period of HealthChoice enrollment. In CY 2018, 41 percent of all ED visits were for potentially-avoidable (preventable) conditions, meaning that the ED visit may have been avoided if the condition had been addressed with high-quality and timely primary care. ED visits in categories 4 (emergent, ED care needed, not preventable/avoidable) and 5 (injury) are the least likely to be prevented with access to primary care. These two categories combined accounted for 22.4 percent of all ED visits in CY 2018.

Adults aged 40 through 64 years had more ED visits related to category 4 (emergent, ED care needed, not preventable/avoidable), than all other age groups; children aged 3 through 18 years had more category 5 (injury) ED visits than other age groups.[23] The inpatient category in Figure 12, which is not a part of the NYU classification, represents ED visits that resulted in a hospital admission. As would be expected, participants with disabilities had a much higher rate of ED visits that led to an inpatient admission than participants in the F&C (families, children, and pregnant women) and MCHP coverage groups.

[23] Data not presented.

Figure 12. ED Visits by HealthChoice Participants Classified According to NYU Avoidable ED Algorithm, CY 2018

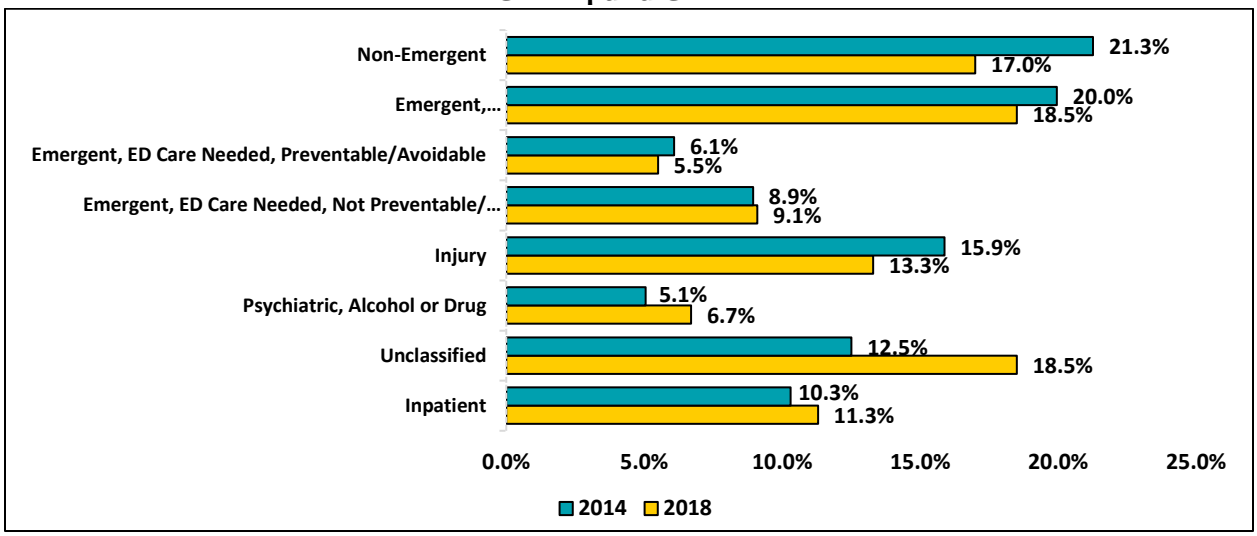


Note: ED visits that result in inpatient stays are not a part of the NYU algorithm and have been added here in their own category. The three categories with ED visits for potentially avoidable preventable conditions are pulled out in the figure.

Figure 13 compares the ED visit classifications for CY 2014 with the classifications for CY 2018. The data show that potentially-avoidable ED visits decreased during the evaluation period: from 47.3[24] percent of all ED visits in CY 2014 to 41.0 percent in CY 2018. To maintain this trend, the Department will continue to monitor ED use with the goal of reducing potentially-avoidable ED visits. ED visits for psychiatric-, alcohol-, or drug-related reasons rose from 5.1 percent in CY 2014 to 6.7 percent in CY 2018.

This trend is in line with regional and nationwide trends, with the likely cause being the opioid epidemic and increased utilization of EDs by individuals seeking treatment for mental health issues. Maryland's 1.6 percent increase is lower than other geographical regions, like the Midwest, that reported substantial increases of 25 percent or greater (CDC, 2018b).

Figure 13. Classification of ED Visits, by HealthChoice Participants, CY 2014 and CY 2018



Preventable or Avoidable Admissions

Ambulatory care-sensitive hospitalizations—i.e., preventable or avoidable hospitalizations—are inpatient admissions that may have been prevented if proper ambulatory care had been provided in a timely and effective manner. According to an Agency for Healthcare Research and Quality (AHRQ) report (Stranges & Stocks, 2010), one in ten hospital admissions nationwide were avoidable. High numbers of avoidable admissions may indicate problems with access to primary and urgent care services or deficiencies in outpatient management, follow-up, and readmission status. The Department monitors potentially-avoidable admissions using AHRQ's Prevention Quality Indicators (PQIs) methodology. PQIs are a set of measures obtained from hospital discharge records for specific primary diagnoses to identify quality of care for ambulatory

[24] The percentage does not precisely reflect the absolute figure due to rounding.

conditions based on the conditions listed in each measure. PQIs are for conditions for which ambulatory care can potentially prevent the need for hospitalization.[25]

Table 28 presents the number of potentially-avoidable inpatient admissions per 100,000 HealthChoice participants aged 18 to 64 years during CY 2014 through CY 2018. Chronic obstructive pulmonary disease (COPD) and asthma in older adults were responsible for the highest number of potentially avoidable admissions throughout the evaluation period. The numbers of potentially-avoidable admissions for lower-extremity amputation in patients with diabetes and perforated appendix were the smallest across the evaluation period.

Table 28. Number of Potentially-Avoidable Inpatient Admissions per 100,000 HealthChoice Participants Aged 18–64 Years, CY 2014–CY 2018[26]

Any PQI #	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
1: Diabetes Short-Term Complications Admissions[27]	196	166	134	147	200
2: Perforated Appendix Admissions	20	16	19	19	13
3: Diabetes Long-Term Complications Admissions	149	128	118	139	133
5: COPD or Asthma in Older Adults Admissions (Ages 40-64)	867	716	730	802	721
7: Hypertension Admissions	71	58	61	86	81
8: Congestive Heart Failure Admissions	245	235	229	225	236
10: Dehydration Admissions	81	90	103	102	98
11: Bacterial Pneumonia Admissions	194	159	177	125	127
12: Urinary Tract Infection Admissions	106	95	90	86	69
14: Uncontrolled Diabetes Admissions	15	18	50	60	97
15: Asthma in Younger Adults Admissions (Ages 18-39)	115	94	85	84	73
16: Lower-Extremity Amputation In Patients With Diabetes*	16	15	20	23	29
90: Prevention Quality Overall Composite	**1,463**	**1,289**	**1,301**	**1,318**	**1,313**
91: Prevention Quality Acute Composite	**380**	**344**	**370**	**313**	**294**
92: Prevention Quality Chronic Composite	**1,083**	**945**	**931**	**1,005**	**1,019**

*The measure preparation logic for PQI 16 was revised, and changes were applied to all years in the measurement period.

[25] The measure estimation logic has been updated using AHRQ PQI Version 6.0. PQI #13 was retired and removed from PQI composites. A full description of the methodological revisions is available here: http://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V60/ChangeLog_PQI_v60.pdf.

[26] This measure presents the number of potentially avoidable admissions per 100,000 participants. The methodology for calculating inpatient admission rates only counts MCO inpatient stays.

[27] The AHRQ Quality Indicators PQI specifications for measure PQI-01 were revised to remove ICD-10 codes E10.65 and E11.65 from numerator, resulting in changes to prior estimates for CY 2015 and CY 2016. More information is available here: https://www.qualityindicators.ahrq.gov/Downloads/Modules/PQI/V2018/ChangeLog_PQI_v2018.pdf.

Table 29 presents the number and percentage of adults who had at least one inpatient admission and the proportion of PQI admissions during the evaluation period. Overall, although the percentage of adults enrolled in HealthChoice with a PQI designation decreased slightly from 1.0 percent in CY 2014 to 0.9 percent in CY 2018, among HealthChoice adults with an inpatient admission, the percentage of participants with a PQI-designated admission increased slightly, from 11.3 percent in CY 2014 to 11.6 percent in CY 2018. The proportion of admissions with PQI indicators will be monitored, especially considering the Maryland Total Cost of Care Model, which encourages continued health care redesign, and provides new tools and resources for primary care providers to better meet the needs of Medicaid participants.

Table 29. Potentially Avoidable Admission Rates among Participants Aged 18–64 Years with ≥1 Inpatient Admission, CY 2014–CY 2018*

Calendar Year	# of Participants in HealthChoice	# of Participants with ≥1 MCO Admissions	% of Participants with ≥1 MCO Admission	# of Participants with Any PQI	% of Participants with Any PQI	% of Participants With ≥1 MCO Admission that had a PQI
2014	636,719	57,720	9.1%	6,518	1.0%	11.3%
2015	687,777	54,585	7.9%	6,373	0.9%	11.7%
2016	675,447	56,351	8.3%	6,430	1.0%	11.4%
2017	724,747	58,800	8.1%	6,722	0.9%	11.4%
2018	748,212	58,303	7.8%	6,789	0.9%	11.6%

*This measure includes only MCO-paid inpatient admissions.

Section IV Conclusion

Over the course of the evaluation period, the percentage of participants who saw their assigned PCPs declined slightly during the evaluation period for six of the eight MCOs,[28] while the percentage of participants who saw any PCP in their MCOs' network increased for all MCOs. When the medical home was defined to include all PCPs within the MCO network, all of the MCOs except for Aetna saw that over 70 percent of their participants had a visit to any PCP within their provider network. Avoidable ED use declined between CY 2014 and CY 2018. However, the proportion of inpatient admissions with a PQI increased slightly over the evaluation period. The Department will continue to monitor this trend to ensure that PQI results are consistent with the continuing use of medical homes to provide preventive care.

[28] Aetna started reporting Maryland Medicaid data in CY 2018.

Section V. Care for Chronic Diseases

Another goal of the HealthChoice program is to improve the quality of health services delivered through the provision of preventive services and chronic care management. This section assesses the demonstration's performance across quality measures—many nationally-recognized, such as HEDIS®—in the areas of preventive health and the management of chronic disease, including behavioral health (mental health and substance use disorders).

Service Utilization and Medication Management for People with Asthma

Asthma is a common chronic disease that affected close to 25.2 million Americans in 2017, including 6.1 million children under the age of 18 (CDC, 2019d). In 2017, 440,338 adults in Maryland had asthma (CDC, 2019d).

The Department monitors service utilization for HealthChoice participants with asthma and uses HEDIS® to report their medication management. The diagnosis of asthma was defined based on 2019 HEDIS® clinical criteria for Medication Management for People with Asthma (MMA). If asthma medications are used correctly, asthma-related hospitalizations, ED visits, and missed school and workdays decrease (CDC, n.d.b).

Although asthma is often thought of as a problem for children, the proportion of older individuals with asthma increased as a result of the ACA expansion; specifically, persons aged 40-64 years now represent the largest share of HealthChoice participants with asthma. See Table 30 for the number of HealthChoice participants with an asthma diagnosis[29] and their distribution by race/ethnicity, sex, region, and age group.

Table 30. Demographic Characteristics of HealthChoice Participants with an Asthma Diagnosis, CY 2014–CY 2018

Demographic Characteristic	Percentage of Total				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Race/Ethnicity					
Asian	1.9%	2.1%	2.1%	2.2%	2.4%
Black	52.9%	51.7%	50.3%	50.0%	49.6%
White	31.9%	32.3%	32.9%	32.7%	31.9%
Hispanic	7.6%	7.3%	7.3%	6.7%	6.9%
Native American	0.4%	0.4%	0.4%	0.3%	0.3%
Other	5.4%	6.3%	7.1%	8.1%	8.9%
Sex					
Female	57.3%	57.4%	57.7%	57.8%	58.2%

[29] The methodology for identifying participants with asthma was corrected to address an error that resulted in over counting the number of people with the condition. Due to changes in HEDIS measure specifications, the methodology was also updated to allow telehealth visits to count toward the measure requirements. Hilltop applied these changes to all years in the measurement period.

Demographic Characteristic	Percentage of Total				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Male	42.8%	42.6%	42.3%	42.2%	41.8%
Region					
Baltimore City	29.5%	27.8%	27.1%	26.5%	25.9%
Baltimore Suburban	27.5%	28.3%	28.5%	28.8%	28.9%
Eastern Shore	10.0%	10.0%	10.8%	10.8%	10.4%
Southern Maryland	4.2%	4.4%	4.7%	4.7%	4.6%
Washington Suburban	20.6%	21.0%	20.6%	20.7%	21.6%
Western Maryland	8.1%	8.3%	8.3%	8.4%	8.5%
Out of State	0.2%	0.2%	0.2%	0.2%	0.1%
Age Group (Years)					
5–9	21.8%	20.5%	19.4%	17.7%	16.6%
10–14	15.9%	15.3%	15.3%	15.4%	15.8%
15–18	7.4%	7.3%	6.9%	6.9%	6.9%
19–20	2.1%	1.9%	1.9%	1.9%	2.2%
21–39	16.8%	16.8%	17.4%	18.4%	18.9%
40–64	36.1%	38.3%	39.0%	39.7%	39.7%
Total Number of Participants	**48,765**	**50,827**	**51,230**	**53,037**	**54,344**

Table 31 presents the number and percentage of HealthChoice participants with an asthma diagnosis who had an ambulatory care visit. The percentage remained stable overall from CY 2014 to CY 2018.

Table 31. Number and Percentage of HealthChoice Participants with an Asthma Diagnosis Who Had an Ambulatory Care Visit, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Ambulatory Care Visit	
		Number	Percentage of Total
2014	48,765	47,365	97.1%
2015	50,827	49,377	97.1%
2016	51,230	50,023	97.6%
2017	53,037	51,761	97.6%
2018	54,344	53,082	97.7%

Table 32 presents the percentage of HealthChoice participants with asthma who had at least one outpatient ED visit for any diagnosis and at least one ED visit with asthma as the primary diagnosis. Overall, the ED visit rate for participants with asthma decreased from 53.4 percent to 46.1 percent. Asthma-related ED visit rates also declined for this population, from 15.3 to 10.2 percent.

Table 32. HealthChoice Participants with an Outpatient ED Visit, by Diagnosis, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One ED Visit (Any Diagnosis)		At Least One ED Visit with Asthma as Primary Diagnosis	
		Number of Participants	Percentage of Total	Number of Participants	Percentage of Total
2014	48,765	26,044	53.4%	7,442	15.3%
2015	50,827	26,427	52.0%	7,093	14.0%
2016	51,230	26,448	51.6%	6,911	13.5%
2017	53,037	26,598	50.1%	6,533	12.3%
2018	54,344	25,042	46.1%	5,536	10.2%

Table 33 presents the number and percentage of HealthChoice participants with asthma who had at least one inpatient admission, as well as participants with asthma who had at least one inpatient admission with asthma as the primary diagnosis. Despite an increase in the denominator, the percentage of participants with asthma who had an inpatient admission decreased from 15.1 to 13.6 percent during the evaluation period. The percentage of participants with asthma who had an inpatient admission with asthma as the primary diagnosis decreased from 3.3 to 1.8 percent.

Table 33. HealthChoice Participants with an Inpatient Admission, by Diagnosis, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Inpatient Admission (Any Diagnosis)		At Least One Inpatient Admission with Asthma as Primary Diagnosis	
		Number of Participants	Percentage of Total	Number of Participants	Percentage of Total
2014	48,765	7,363	15.1%	1,617	3.3%
2015	50,827	7,260	14.3%	1,383	2.7%
2016	51,230	7,255	14.2%	991	1.9%
2017	53,037	7,559	14.3%	1,036	2.0%
2018	54,344	7,410	13.6%	964	1.8%

Table 34 presents the percentage of HealthChoice participants aged five through 64 years with persistent asthma who remained on asthma-controller medication for at least 50 percent and at

least 75 percent of their treatment period in CY 2014 through CY 2018 (MetaStar, Inc., 2019). In CY 2018, 59.6 percent of this population demonstrated at least 50 percent compliance. Despite the overall increase in medication compliance, the program did not consistently meet the HEDIS® average during the measurement period. The program outperformed the national HEDIS® mean in CY 2015 but fell below from CY 2016 through CY 2018.

Table 34. Percentage of HealthChoice Members Aged 5–64 Years with Persistent Asthma Who Remained on a Prescribed Controller Medication for at Least 50% and 75% of Their Treatment Period, CY 2014–CY 2018*

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Remained on Prescribed Controller Medication for at Least 50% of Treatment Period					
HealthChoice	51.5%	56.9%	55.8%	58.2%	59.6%
National HEDIS® Mean	-	+	-	-	-
Remained on Prescribed Controller Medication for at Least 75% of Treatment Period					
HealthChoice	27.0%	34.1%	31.1%	32.9%	33.7%
National HEDIS® Mean	-	+	-	-	-

*Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

Comprehensive Diabetes Care

The Department combines health care utilization and quality measures to evaluate HealthChoice's performance in diabetes management. This section of the report displays HealthChoice participants with diabetes by their demographic characteristics, as well as measures of their inpatient admissions, outpatient ED visits, and ambulatory care service utilization. HEDIS® clinical criteria for the Comprehensive Diabetes Care measure identified participants with diabetes. In addition, this section investigates whether the completion of recommended diabetes screenings affects use of ED services.

Table 35 shows HealthChoice participants with a diabetes diagnosis according to the numbers and percentages within categories of race/ethnicity, sex, region, and age group. The distribution of participants with a diabetes diagnosis remained relatively consistent within demographic characteristics throughout the evaluation period. As a likely consequence of the enrollment of new participants through the ACA in CY 2014, the number of HealthChoice participants with diabetes increased by 8.6 percentage points between CY 2014 and CY 2015 (from 49,137 to 55,915).

Black participants with diabetes exceeded the proportion of White participants with diabetes by a ratio of nearly two to one. Both groups, as well as Hispanic participants, experienced a decrease in their share of the HealthChoice population with diabetes during the five-year evaluation period, while the proportion among the "Other" race category increased from 7.8 percent in CY 2014, to 12.7 percent in CY 2018. The proportion of male HealthChoice participants with diabetes increased from 40.5 percent in CY 2014 to 43.3 percent in CY 2018,

likely because of the expansion of coverage under the ACA. The proportion of older age groups with diabetes also increased, from 76.4 percent in CY 2014 to 77.9 percent in CY 2018.

Table 35. Demographic Characteristics of HealthChoice Participants with Diabetes, CY 2014–CY 2018

Demographic Characteristic	Percentage of Total				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Race/Ethnicity					
Asian	5.4%	5.8%	5.9%	5.9%	5.9%
Black	51.4%	50.2%	50.1%	49.8%	49.5%
White	30.5%	29.7%	29.2%	28.5%	27.9%
Hispanic	4.5%	4.2%	3.9%	3.7%	3.7%
Native American	0.3%	0.4%	0.3%	0.3%	0.3%
Other*	7.8%	9.8%	10.6%	11.7%	12.7%
Sex					
Female	59.5%	58.6%	58.1%	57.3%	56.7%
Male	40.5%	41.5%	41.9%	42.7%	43.3%
Region					
Baltimore City	25.2%	24.0%	23.9%	23.5%	23.2%
Baltimore Suburban	26.1%	26.0%	26.3%	26.6%	26.9%
Eastern Shore	10.2%	10.0%	10.1%	10.0%	9.8%
Southern Maryland	5.2%	5.2%	5.2%	5.3%	5.3%
Washington Suburban	25.3%	26.9%	26.6%	26.8%	27.0%
Western Maryland	7.8%	7.7%	7.8%	7.7%	7.8%
Out of State	0.2%	0.2%	0.1%	0.2%	0.2%
Age Group (Years)					
18–40	23.6%	22.2%	22.1%	22.1%	22.2%
41–64	76.4%	77.8%	77.8%	78.0%	77.9%
Total Number of Participants	**49,137**	**55,915**	**57,162**	**59,100**	**59,566**

*Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.

Table 36 presents the number and percentage of HealthChoice participants with diabetes who had an ambulatory care visit. The rate decreased slightly despite the increase in the number of participants with diabetes.

Table 36. Number and Percentage of HealthChoice Participants with Diabetes Who Had an Ambulatory Care Visit, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Ambulatory Care Visit	
		Number of Participants	Percentage of Total
2014	49,137	46,966	95.6%
2015	55,915	52,435	93.8%
2016	57,162	53,949	94.4%
2017	59,100	55,828	94.5%
2018	59,566	56,177	94.3%

Table 37 presents the number and percentage of HealthChoice participants with diabetes who had an outpatient ED visit. The number of participants with diabetes who had an ED visit decreased by 6.0 percentage points—from 48.7 percent in CY 2014 to 42.7 percent in CY 2018. This may indicate that comprehensive diabetes care in HealthChoice is successfully preventing diabetes complications leading to ED visits.

Table 37. Number and Percentage of HealthChoice Participants with Diabetes Who Had an Outpatient ED Visit, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One ED Visit	
		Number	Percentage of Total
2014	49,137	23,915	48.7%
2015	55,915	25,762	46.1%
2016	57,162	26,333	46.1%
2017	59,100	26,771	45.3%
2018	59,566	25,422	42.7%

Table 38 presents the number and percentage of HealthChoice participants with diabetes who had at least one inpatient admission. This measure similarly decreased during the evaluation period—from 24.0 percent to 20.8 percent—indicating the potential success of the HealthChoice program in proactively targeting diabetes management.

Table 38. Number and Percentage of HealthChoice Participants with Diabetes Who Had an Inpatient Admission, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Inpatient Admission	
		Number	Percentage of Total
2014	49,137	11,806	24.0%
2015	55,915	11,860	21.2%
2016	57,162	12,162	21.3%
2017	59,100	12,481	21.1%
2018	59,566	12,405	20.8%

Controlling diabetes requires monitoring blood glucose levels and looking for damaged nerve tissue in the eye that may threaten sight. Table 39 presents the annual HealthChoice performance on these measures for CY 2014 through CY 2018. HEDIS® analyses use medical chart reviews, whereas the diabetes analyses presented in the rest of this section rely on administrative data (MCO encounter and FFS claims). HealthChoice consistently performed above the national HEDIS® average on HbA1c testing throughout the evaluation period. However, in CY 2018, HealthChoice fell below the HEDIS® average on eye exams. The observed decrease in the eye exam measure may have resulted from the removal of this measure from the VBP program in CY 2015. The inclusion of the HbA1c measure in the VBP program in 2014 may explain the higher percentages across the measurement period.

Table 39. Percentage of HealthChoice Members Aged 18–64 Years with Diabetes Who Received Comprehensive Diabetes Care, Compared with the National HEDIS® Average, CY 2014–CY 2018*

HEDIS® Measure	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Eye (Retinal) Exam					
HealthChoice	61.5%	60.2%	57.0%	57.8%	54.1%
National HEDIS® Average	+	+	+	+	-
HbA1c Test					
HealthChoice	89.0%	88.8%	88.9%	87.9%	88.8%
National HEDIS® Average	+	+	+	+	+

Note: Because of the NCQA restrictions, national HEDIS® means cannot be published. Therefore, a "+" sign indicates that Maryland's rate is above the national HEDIS® mean, while a "-" sign indicates that Maryland's rate is below the national mean.

*HealthChoice averages in CYs 2014, 2015, and 2017 were influenced by the inclusion of HEDIS® rates from newer MCOs.

Using the Department's MCO encounters and FFS claims to assess performance leads to different results than HEDIS® methodologies. However, about four of every five participants (82.5 percent) received hemoglobin A1c (HbA1c) testing during CY 2018 (Table 40). HealthChoice participants aged 18 to 40 years were less likely to receive at least one HbA1c test than participants aged 41 to 64 years. Although the proportion of all participants with diabetes receiving a retinal exam (43.3 percent) was lower than those receiving HbA1c tests (82.5 percent), older participants were more likely than younger members to receive an eye exam. Specifically, 46.0 percent of participants aged 41 to 64 years—compared to 33.8 percent of participants aged 18 to 40 years—received a retinal exam.

Additional analysis on service utilization by participants with diabetes showed that 6.5 percent of participants with diabetes had five or more outpatient ED visits during CY 2018. Table 40 shows the respective proportions of patients in each category who were or were not administered comprehensive diabetes care follow-up services, as well as their frequency of ED utilization.

Table 40. Number of Participants with Diabetes by Age, Frequency of ED Utilization, and Receipt of Diabetes Follow-Up Care, CY 2018

	Total Participants	Receipt of Diabetes Follow-Up Care					
		No Follow-Up		Completed Diabetes Follow-Up			
				HbA1c		Retinal Exam	
		Number	Percentage	Number	Percentage	Number	Percentage
18 to 40 Years	10,901	2,249	20.6%	8,144	74.7%	3,681	33.8%
41 to 64 Years	38,093	4,413	11.6%	32,269	84.7%	17,534	46.0%
Fewer than 5 Outpatient ED Visits	45,993	6,097	13.3%	38,131	82.9%	20,099	43.7%
5 or More Outpatient ED Visits	3,001	565	18.8%	2,282	76.0%	1,116	37.2%
Total	**48,994**	**6,662**	**13.6%**	**40,413**	**82.5%**	**21,215**	**43.3%**

To test the effects of clinical follow-up of diabetes on ED use—accounting for participant's sex, race, age, disease severity, and region of residence—Hilltop applied logistic regression techniques to the data. The results show that participants who had at least one HbA1c test were about 29 percent less likely to have high ED use[30] than participants who were not administered screening. This pattern of results was consistent across all five years of the evaluation period.

Participants who had a retinal exam also had significantly lower odds (22 percent) of high ED utilization compared to participants who were not administered the service.[31] These patterns of

[30] (adjusted odds ratio), AOR = 0.71 [95% confidence interval, CI: 0.65, 0.79]
[31] (AOR = 0.78 [95% CI: 0.72, 0.84]).

results were consistent across all five years. These results may demonstrate the effect of follow-up care for diabetes in improving health outcomes during the evaluation period through reductions in ED use and how preventive services can lower potentially avoidable utilization.

Under the HealthChoice demonstration waiver, the Department received approval to expand coverage of the National Diabetes Prevention Program lifestyle change program to all eligible HealthChoice participants as of September 1, 2019. By identifying participants early through screening and testing for prediabetes, the Department hopes to reduce the incidence of diabetes and increase the quality of life for participants in the Maryland Medicaid program. This program also aligns with the population health goals under Maryland's Total Cost of Care Model.

HIV/AIDS

The Department continuously monitors service utilization for HealthChoice participants with HIV/AIDS. This section of the report presents the enrollment distribution of HealthChoice participants with HIV/AIDS by age group and race/ethnicity, as well as measures of ambulatory care service utilization, outpatient ED visits, 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. Antiretroviral therapy (ART) is a combination of HIV medications used to slow the progression of HIV. ART is recommended for everyone with HIV and should begin as soon as possible after diagnosis (CDC, 2019b). Early initiation of ART lowers the risk of an individual with HIV of developing AIDS and other complications (Lundgren et al., 2015).

Table 41 presents the percentage of participants with HIV/AIDS by age group and race/ethnicity for CY 2014 and CY 2018.

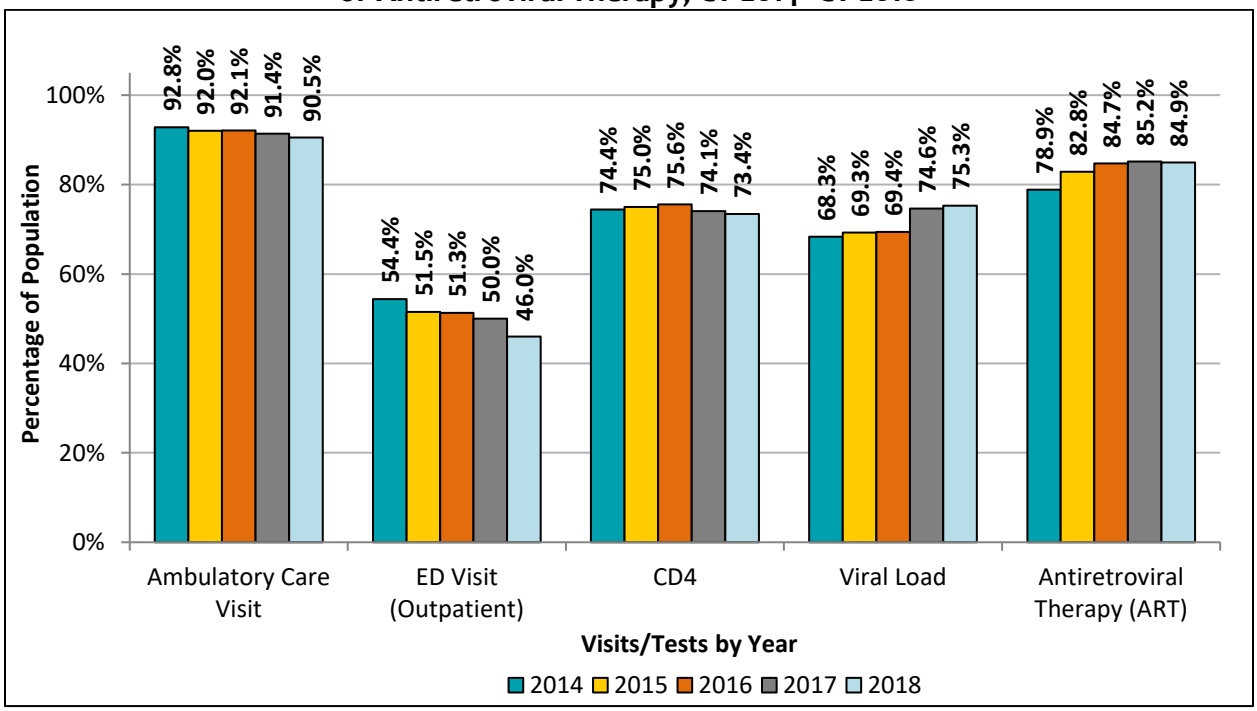
Table 41. Distribution of HealthChoice Participants with HIV/AIDS, by Age Group and Race/Ethnicity, CY 2014 and CY 2018

Demographic Characteristic	CY 2014		CY 2018	
	# of Participants	% of Total	# of Participants	% of Total
Age Group (Years)				
0–18	267	5.1%	163	2.6%
19–39	1,500	28.5%	1,918	30.2%
40–64	3,487	66.4%	4,260	67.2%
Total	**5,254**	**100%**	**6,341**	**100%**
Race/Ethnicity				
Asian	*	*	*	*
Black	4,466	85.0%	5,215	82.2%
White	507	9.6%	577	9.1%
Hispanic	59	1.1%	77	1.2%
Native American	*	*	*	*
Other**	186	3.5%	415	6.5%
Total	**5,254**	**100%**	**6,341**	**100%**

*Cell values of 10 or less have been suppressed.
**Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.

Figure 14 shows service utilization by HealthChoice participants with HIV/AIDS during the study period. The percentage of participants with an outpatient ED visit fell by 8.4 percentage points between CY 2014 and CY 2018. In addition, nearly all participants who had at least one outpatient ED visit also received care through an ambulatory care visit or treatment from an outpatient pharmacy, indicating that participants with HIV/AIDS have access to health care services and are not exclusively relying on the ED as a source of care. The HealthChoice program also experienced an increase in one HIV/AIDS-related quality measure during the evaluation period. The percentage of individuals with HIV/AIDS who received viral load testing increased by 7.0 percentage points, but the percentage of individuals who received CD4 testing decreased slightly, by 1.0 percentage point.

Figure 14. Percentage of HealthChoice Participants with HIV/AIDS Who Had an Ambulatory Care Visit, Outpatient ED Visit, CD4 Testing, Viral Load Testing, or Antiretroviral Therapy, CY 2014–CY 2018



According to the CDC (2019a) as published in its annual HIV Surveillance Report, there was a national HIV incidence rate of 11.4 per 100,000 people in 2018. In Maryland, the incidence rate of HIV diagnoses for 2018 was 16.2 per 100,000 people, a decrease from the previous year's rate of 17.0 (CDC, 2019a). The CDC (2020) estimates that nearly 40 percent of new HIV infections are transmitted by people who have undiagnosed HIV. Thus, HIV screening is an important step in determining HIV status and starting appropriate treatment. The CDC currently recommends that everyone between 13 and 64 years of age be tested for HIV at least once or more frequently if they are at high risk.

Table 42 shows HIV screenings for HealthChoice participants aged 15 to 64 years from CY 2014 through CY 2018.

Table 42. HIV Screening in the HealthChoice Population for Participants Aged 15–64 Years, CY 2014–CY 2018

HealthChoice Participants	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Total Number	718,220	771,917	758,495	811,183	836,653
Number Received HIV Screening	106,484	109,523	123,061	130,107	142,678
Percentage Received HIV Screening	14.8%	14.2%	16.2%	16.0%	17.1%

For people who are not HIV positive but are at risk of contracting the infection, pre-exposure prophylaxis (PrEP) can help prevent HIV (CDC, 2019c). PrEP is a daily medication that reduces the risk of HIV infection (CDC, 2020). Table 43 presents the percentage of HealthChoice participants who received PrEP from CY 2014 to CY 2018.

Table 43. HealthChoice Participants Who Received HIV PrEP, CY 2014–CY 2018

HealthChoice Participants	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Total Number	1,247,658	1,304,107	1,285,431	1,355,443	1,389,716
Number Received HIV PrEP	3,045	3,027	2,802	2,146	1,949
Percentage Received HIV PrEP	0.2%	0.2%	0.2%	0.2%	0.1%

Behavioral Health

The Department contracts with an ASO to administer specialty MHD and SUD services, collectively called behavioral health services. Although the managed care benefit package excludes these services, MCOs are mandated to ensure that their enrollees receive all needed health services, including those that are carved out. SUD treatments were included as part of the MCO benefit package until the end of CY 2014. In taking a whole-person view, this section includes behavioral health services paid on an FFS basis by the ASO but provided to individuals enrolled in the HealthChoice program.

Behavioral Health Demographics and Service Utilization

Table 44 presents the number and percentage of HealthChoice participants by behavioral health diagnosis group. These groups include MHD-only, SUD-only, dual diagnosis of MHD and SUD, or none of these diagnoses. Overall, the percentage of HealthChoice participants without a behavioral health diagnosis decreased from 84.8 percent in CY 2014 to 82.5 percent in CY 2018, accompanied by corresponding increases across all categories of behavioral health diagnoses.

Table 44. Number and Percentage of HealthChoice Participants with a Behavioral Health Diagnosis, by Diagnosis, CY 2014–CY 2018

Diagnosis	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
MHD-Only	128,733 (10.3%)	142,223 (10.9%)	148,186 (11.5%)	156,694 (11.6%)	165,198 (11.9%)
SUD-Only	36,067 (2.9%)	35,628 (2.7%)	37,938 (3.0%)	41,632 (3.1%)	43,274 (3.1%)
Dual Diagnosis (MHD + SUD)	25,076 (2.0%)	27,601 (2.1%)	30,646 (2.4%)	33,085 (2.4%)	34,615 (2.5%)
No Behavioral Health Diagnosis	1,060,960 (84.8%)	1,098,828 (84.2%)	1,069,037 (83.1%)	1,124,032 (82.9%)	1,146,629 (82.5%)
Total	**1,250,836**	**1,304,280**	**1,285,807**	**1,355,443**	**1,389,716**

The Department monitors the extent to which participants with a behavioral health diagnosis access ambulatory care services. In CY 2018, 93.9% percent of all participants with an MHD—that includes both participants diagnosed with MHD-only and those with a co-occurring MHD and SUD diagnosis—visited a health care provider for an ambulatory care visit (Table 45). Across the evaluation period, the ambulatory care visit rate among all participants with an MHD-only diagnosis decreased slightly from CY 2014 to CY 2018, while the rate increased for participants with an SUD-only diagnosis. Participants with a dual diagnosis of MHD and SUD were consistently more likely to receive an ambulatory care visit than were participants with an SUD-only diagnosis; however, the ambulatory care visit rate of SUD-only participants increased by 3.8 percentage points between CY 2017 and CY 2018.

Table 45. HealthChoice Participants with an Ambulatory Care Visit, by Behavioral Health Diagnosis, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Ambulatory Care Visit	
		Number of Participants	Percentage of Total Participants
MHD-Only			
2014	128,733	120,059	93.3%
2015	142,223	131,875	92.7%
2016	148,186	137,679	92.9%
2017	156,694	145,397	92.8%
2018	165,198	153,182	92.7%
SUD-Only			
2014	36,067	26,057	72.2%
2015	35,628	25,355	71.2%
2016	37,938	27,154	71.6%
2017	41,632	32,222	77.4%
2018	43,274	35,152	81.2%
Dual Diagnosis (MHD + SUD)			
2014	25,076	23,072	92.0%
2015	27,601	25,257	91.5%

Calendar Year	Total Number of Participants	At Least One Ambulatory Care Visit	
		Number of Participants	Percentage of Total Participants
2016	30,646	27,973	91.3%
2017	33,085	30,674	92.7%
2018	34,615	32,499	93.9%
Total			
2014	189,876	169,188	89.1%
2015	205,452	182,487	88.8%
2016	216,770	192,806	88.9%
2017	231,411	208,293	90.0%
2018	243,087	220,833	90.8%

Table 46 displays the number and percentage of all HealthChoice participants with a behavioral health diagnosis who had at least one outpatient ED visit.[32] Overall, the percentage of participants with an MHD-only diagnosis who visited the ED declined from 46.7 percent in CY 2014 to 39.7 percent in CY 2018. In each year of the evaluation period, participants with co-occurring diagnoses had a higher rate of ED utilization compared to participants with an MHD-only or SUD-only diagnosis.

Table 46. HealthChoice Participants with at Least One Outpatient ED Visit, by Behavioral Health Diagnosis, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One ED Visit	
		Number of Participants	Percentage of Total Participants
MHD-Only			
2014	128,733	60,059	46.7%
2015	142,223	63,326	44.5%
2016	148,186	65,571	44.3%
2017	156,694	67,557	43.1%
2018	165,198	65,561	39.7%
SUD-Only			
2014	36,067	18,918	52.5%
2015	35,628	18,010	50.6%
2016	37,938	19,251	50.7%
2017	41,632	20,972	50.4%
2018	43,274	20,430	47.2%
Dual Diagnosis (MHD + SUD)			
2014	25,076	17,341	69.2%
2015	27,601	18,685	67.7%
2016	30,646	20,887	68.2%
2017	33,085	22,530	68.1%

[32] This measure excludes ED visits that resulted in an inpatient hospital admission.

Calendar Year	Total Number of Participants	At Least One ED Visit	
		Number of Participants	Percentage of Total Participants
2018	34,615	22,663	65.5%
Total			
2014	189,876	96,318	50.7%
2015	205,452	100,021	48.7%
2016	216,770	105,709	48.8%
2017	231,411	111,059	48.0%
2018	243,087	108,654	44.7%

Table 47 displays the number and percentage of all HealthChoice participants with a behavioral health diagnosis who had at least one inpatient admission. Overall, the percentage of participants with a behavioral health diagnosis who had an inpatient admission declined from 17.0 percent in CY 2014 to 14.6 percent in CY 2018. Each of the behavioral health diagnosis groups experienced the same downward trend during this time. In each year of the evaluation period, participants with co-occurring diagnoses had a higher rate of impatient admissions than participants with an MHD-only or SUD-only diagnosis.

Table 47. HealthChoice Participants with an Inpatient Admission, by Behavioral Health Diagnosis, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Inpatient Visit	
		Number of Participants	Percentage of Total Participants
MHD-Only			
2014	128,733	18,116	14.1%
2015	142,223	18,406	12.9%
2016	148,186	18,544	12.5%
2017	156,694	19,198	12.3%
2018	165,198	19,172	11.6%
SUD-Only			
2014	36,067	5,579	15.5%
2015	35,628	5,195	14.6%
2016	37,938	5,434	14.3%
2017	41,632	6,176	14.8%
2018	43,274	6,126	14.2%
Dual Diagnosis (MHD + SUD)			
2014	25,076	8,552	34.1%
2015	27,601	8,974	32.5%
2016	30,646	9,731	31.8%
2017	33,085	10,352	31.3%
2018	34,615	10,166	29.4%
Total			
2014	189,876	32,247	17.0%

Calendar Year	Total Number of Participants	At Least One Inpatient Visit	
		Number of Participants	Percentage of Total Participants
2015	205,452	32,575	15.9%
2016	216,770	33,709	15.6%
2017	231,411	35,726	15.4%
2018	243,087	35,464	14.6%

Table 48 shows the rates of MHD, SUD, and co-occurring MHD and SUD disorders among HealthChoice participants by race and ethnicity during CY 2014 and CY 2018. Between CY 2014 and CY 2018, the percentage of HealthChoice participants who had a behavioral health condition increased. An increase in behavioral health conditions was noted across all racial and ethnic groups—except for a slight decline in the percentage of Hispanic members with an SUD-only, and stable rates among Native American and participants of "Other" race/ethnicity.

Table 48. Distribution of HealthChoice Participants Aged 0–64, by Race/Ethnicity and Behavioral Health Conditions, CY 2014 and CY 2018

Race/Ethnicity	CY 2014		CY 2018	
	Number of Participants	Percentage of Total Race/Ethnicity	Number of Participants	Percentage of Total Race/Ethnicity
MHD-Only				
Black	61,602	10.6%	76,150	13.2%
White	51,561	13.9%	59,575	15.8%
Hispanic	6,633	5.2%	10,097	9.1%
Asian	1,588	3.1%	2,637	4.2%
Native American	376	11.3%	508	12.6%
Other	6,973	6.0%	16,231	6.3%
Total	**128,733**	**10.3%**	**165,198**	**13.5%**
SUD-Only				
Black	14,938	2.6%	15,665	2.7%
White	18,112	4.9%	22,745	6.1%
Hispanic	986	0.8%	823	0.7%
Asian	268	0.5%	358	0.6%
Native American	145	4.3%	175	4.3%
Other	1,618	1.4%	3,508	1.4%
Total	**36,067**	**2.9%**	**43,274**	**3.1%**
Dual Diagnosis (MHD + SUD)				
Black	9,863	1.7%	13,403	2.3%
White	13,882	3.7%	18,211	4.8%
Hispanic	298	0.2%	452	0.4%
Asian	94	0.2%	176	0.3%
Native American	110	3.3%	158	3.9%

Race/Ethnicity	CY 2014		CY 2018	
	Number of Participants	Percentage of Total Race/Ethnicity	Number of Participants	Percentage of Total Race/Ethnicity
Other	829	0.7%	2,215	0.9%
Total	**25,076**	**2.0%**	**34,615**	**2.5%**
No Behavioral Health Diagnosis				
Black	495,957	85.2%	473,706	81.8%
White	286,865	77.4%	275,672	73.3%
Hispanic	119,591	93.8%	99,392	89.7%
Asian	49,268	96.2%	59,734	95.0%
Native American	2,708	81.1%	3,206	79.2%
Other*	106,571	91.9%	234,919	91.5%
Total	**1,060,960**	**84.8%**	**1,146,629**	**82.5%**

*Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.

Mental Health Services

Table 49 displays the key demographic characteristics of HealthChoice participants with a diagnosis of an MHD.[33] The proportion of participants having an MHD who were Black decreased across the evaluation period: from 46.5 percent in CY 2014 to 44.8 percent in CY 2018. In CY 2014, children and adults made up 39.6 and 60.5 percent, respectively, of participants with an MHD. The proportion of adults rose to 61.3 percent in CY 2018. These increases may result from the large influx of adults during the ACA expansion.

Table 49. Demographic Characteristics of HealthChoice Participants with an MHD, CY 2014–CY 2018

Demographic Characteristic	Percentage of Total Participants				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Race/Ethnicity					
Asian	1.1%	1.1%	1.2%	1.3%	1.4%
Black	46.5%	45.9%	45.6%	45.1%	44.8%
White	42.6%	41.9%	41.1%	40.2%	38.9%
Hispanic	4.5%	4.7%	4.8%	5.1%	5.3%
Native American	0.3%	0.3%	0.3%	0.3%	0.3%
Other*	5.1%	6.0%	7.1%	8.1%	9.2%
Total	**100%**	**100%**	**100%**	**100%**	**100.0%**
Sex					
Female	54.4%	54.4%	54.1%	54.3%	54.6%

[33] Individuals are identified as having an MHD if they have any ICD-10 diagnosis codes that begin with F200-203, F205, F2081, F2089, F209, F21-24, F250, F251, F258, F259, F28-29, F301-304, F308-325, F328-334, F338-341, F348-349, F39-45, F48, F50, F53-54, F60, F63-66, F68-69, F843, F900-902, F908-913, F918-919, F930, F938-942, F948-949, F980-981, F984, F9888-989, F99, G21, G24-25, R45, O99, Z046; OR any ICD-9 diagnosis codes that begin with 295-302, 307-309, 311- 314, 332.1, 333.90, 333.99, 648 according to the COMAR definition of MHD.

Demographic Characteristic	Percentage of Total Participants				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Male	45.7%	45.6%	45.9%	45.7%	45.5%
Total	**100%**	**100%**	**100%**	**100%**	**100.0%**
Region					
Baltimore City	27.6%	27.1%	26.8%	26.1%	25.3%
Baltimore Suburban	29.9%	30.1%	30.0%	30.2%	30.7%
Eastern Shore	11.3%	11.3%	11.3%	11.2%	10.9%
Southern Maryland	4.6%	4.7%	4.6%	4.7%	4.7%
Washington Suburban	15.8%	16.4%	16.9%	17.3%	18.0%
Western Maryland	10.5%	10.3%	10.3%	10.3%	10.2%
Out of State	0.2%	0.2%	0.1%	0.1%	0.1%
Total	**100%**	**100%**	**100%**	**100%**	**100.0%**
Age Group (Years)					
0–18	39.6%	39.4%	38.7%	38.5%	38.7%
19–64	60.5%	60.7%	61.3%	61.5%	61.3%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Total Participants	**153,809**	**169,824**	**178,832**	**189,779**	**199,813**

*Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.

Substance Use Disorder Services

This section evaluates the quality and comprehensiveness of SUD-related care provided to HealthChoice participants.

SUD services were provided under the HealthChoice MCO benefit package during the first year of the evaluation period. They were then carved out and administered by the ASO in alignment with specialty mental health services.[34] Table 50 presents the demographic characteristics of HealthChoice participants with an SUD diagnosis. Among racial and ethnic groups, White participants made up the highest proportion of persons with an SUD, followed by Black participants. The share of White participants with SUD remained relatively stable from CY 2014 to CY 2018; while the percentage of Black participants with SUD decreased. Between CY 2014 and CY 2018, males remained the majority of persons with SUD, making up 56.4 percent of the CY 2018 population. Also during the evaluation period, the region with the highest share of persons with SUD switched from Baltimore City in CY 2014 to the Baltimore Suburban region in CY 2018.

[34] Individuals were identified as having an SUD if they had a claim that met the COMAR 10.67.08.02 definition of SUD, which includes presence of one of the following: (ICD-10 diagnosis codes: F10-19, O99310-99315, O99320-99325, R780-785; OR ICD-9 diagnosis codes:291-292, 303-304, 305.0, 305.2-305.9),648.3; WITH (Revenue codes 0114, 0116, 0124, 0126, 0134, 0136, 0154, 0156, 0762, 0900, 0905-0906, 0911-0916, 0918-0919, 0944-0945, 0450-0452, 0456, 0459 OR Procedure codes 99.201-99.205, 99.211-99.215, J8499, J2315); HCPCS H0001, H0004, H0005, H0014-H0016, H0020, H0047, H2036, J8499 –OR Revenue code of "0100" and a provider type of "55."

Table 50. Demographic Characteristics of HealthChoice Participants with an SUD, CY 2014–CY 2018

Demographic Characteristics	Percentage of Total Participants				
	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Race/Ethnicity					
Asian	0.6%	0.6%	0.6%	0.6%	0.7%
Black	40.6%	38.8%	37.8%	37.5%	37.3%
White	52.3%	53.5%	53.9%	53.6%	52.6%
Hispanic	2.1%	1.9%	1.6%	1.5%	1.6%
Native American	0.4%	0.4%	0.4%	0.4%	0.4%
Other*	4.0%	4.9%	5.7%	6.5%	7.4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Sex					
Female	44.9%	44.4%	43.8%	43.4%	43.6%
Male	55.1%	55.6%	56.2%	56.6%	56.4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Region					
Baltimore City	33.4%	32.0%	30.5%	30.1%	29.3%
Baltimore Suburban	29.5%	30.2%	31.3%	31.6%	32.0%
Eastern Shore	11.3%	12.1%	12.5%	12.7%	12.6%
Southern Maryland	5.4%	5.3%	5.7%	5.8%	5.7%
Washington Suburban	10.2%	9.8%	9.1%	8.5%	8.9%
Western Maryland	10.0%	10.5%	10.9%	11.2%	11.3%
Out of State	0.2%	0.2%	0.1%	0.1%	0.1%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Age Group (Years)					
0-18	7.8%	6.3%	4.9%	4.1%	4.2%
19-64	92.2%	93.7%	95.2%	95.9%	95.8%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Total Participants	**61,143**	**63,229**	**68,584**	**74,717**	**77,889**

*Other race/ethnicity category includes Pacific Islanders, Alaskan Natives, and unknown.

Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a public health approach for delivering population screening, early intervention, and treatment services[35] targeting SUD. Health care providers using SBIRT ask participants about substance use during routine medical and dental visits, provide brief advice, and then, if appropriate, refer participants who are at risk of SUDs to more intensive treatment (SAMHSA, 2012). In July 2016, new SBIRT codes were

[35] An SBIRT service is identified by the following procedure codes: 99408, 99409, W7000, W7010, W7020, W7021, and W7022 during the calendar year.

introduced to give providers greater flexibility when billing SBIRT services (Maryland Department of Health, 2016).

Table 51 presents the number of participants who received an SBIRT service during CY 2015 to CY 2018. The number of people receiving SBIRT services increased across the evaluation period. The number of assessments completed per 1,000 HealthChoice participants doubled between CY 2015 and CY 2016, and more than doubled between CY 2017 and CY 2018. Adolescents aged 15 to 18 years had the highest rate of SBIRT services completed in CY 2016 through CY 2018, followed by adults aged 40 to 64. The number of assessments completed per 1,000 HealthChoice participants aged 15 to 18 tripled between CY 2017 and CY 2018.

Table 51. Number and Percentage of Health Choice Participants Receiving an SBIRT Service, by Age Group, CY 2015–CY 2018

	Age Group (Years)					Total
	14 and under	15–18	19–20	21–39	40–64	
CY 2015*						
# of Participants	532,231	110,125	46,193	345,781	269,777	**1,304,107**
# with Service	115	199	65	634	649	**1,662**
Per 1000	0.2	1.8	1.4	1.8	2.4	**1.3**
CY 2016*						
# of Participants	527,049	108,872	46,018	341,629	261,863	**1,285,431**
# with Service	491	571	159	1,108	1,052	**3,381**
Per 1000	0.9	5.2	3.5	3.2	4	**2.6**
CY 2017*						
# of Participants	544,260	113,790	49,229	371,558	276,606	**1,355,443**
# with Service	717	1,131	256	1,676	2,005	**5,785**
Per 1000	1.3	9.9	5.2	4.5	7.2	**4.3**
CY 2018*						
# of Participants	553,063	117,167	51,214	385,419	282,853	**1,389,716**
# with Service	3,321	3,485	704	3,577	3,870	**14,957**
Per 1000	6	29.7	13.7	9.3	13.7	**10.8**

*SBIRT services began in CY 2015 and new codes were introduced in CY 2016 influencing the increase.

The Department also monitors the extent to which HealthChoice participants with an SUD access ambulatory care services. Table 52 displays the percentage of HealthChoice participants with an SUD who received an ambulatory care visit and at least one ambulatory care visit with an SUD as a primary diagnosis. From CY 2014 to CY 2018, ambulatory care utilization by participants with an SUD increased from 72.2 percent to 81.2 percent.

The percentage of participants with any SUD—which includes participants diagnosed with only an SUD and those with a co-occurring MHD and SUD—who had at least one ambulatory care visit

increased from 80.4 percent in 2014 to 86.9 percent in 2018. As noted above, SUD treatment was included as part of the MCO benefit package until the end of CY 2014. Participants with a co-occurring MHD and SUD were consistently more likely to receive an ambulatory care visit, followed by participants with only an SUD diagnosis. The rate of ambulatory care utilization among participants with a co-occurring MHD and SUD increased from 92.0 percent in CY 2014 to 93.9 percent in CY 2018.

Participants diagnosed with an SUD-only experienced the greatest increase—5.8 percentage points—between CY 2016 and CY 2017. The percentage of participants who had at least one ambulatory care visit with a primary diagnosis of an SUD increased across the measurement period as well. Among all participants with an SUD, the percentage with at least one SUD-related ambulatory care visit increased by 27.4 percentage points between CY 2014 and CY 2018.

Table 52. HealthChoice Participants with an Ambulatory Care Visit, by SUD Status, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Ambulatory Care Visit (Any Diagnosis)		At Least One Ambulatory Care Visit with SUD as Primary Diagnosis	
		Number of Participants	Percentage of Total Participants	Number of Participants	Percentage of Total Participants
SUD-Only					
2014	36,067	26,057	72.2%	6,039	16.7%
2015	35,628	25,355	71.2%	6,027	16.9%
2016	37,938	27,154	71.6%	6,837	18.0%
2017	41,632	32,222	77.4%	15,038	36.1%
2018	43,274	35,152	81.2%	19,060	44.0%
Dual Diagnosis (MHD + SUD)					
2014	25,076	23,072	92.0%	4,830	19.3%
2015	27,601	25,257	91.5%	5,836	21.1%
2016	30,646	27,973	91.3%	6,909	22.5%
2017	33,085	30,674	92.7%	12,773	38.6%
2018	34,615	32,499	93.9%	16,146	46.6%
Total					
2014	61,143	49,129	80.4%	10,869	17.8%
2015	63,229	50,612	80.0%	11,863	18.8%
2016	68,584	55,127	80.4%	13,746	20.0%
2017	74,717	62,896	84.2%	27,811	37.2%
2018	77,889	67,651	86.9%	35,206	45.2%

Table 53 displays the percentage of HealthChoice participants with an SUD who had at least one outpatient ED visit and at least one ED visit with an SUD as a primary diagnosis.[36] From CY 2014 to CY 2018, the number of participants with both an SUD-only and dual diagnosis (MHD and SUD) who had at least one ED visit decreased by 5.3 and 3.7 percentage points, respectively. The percentage of participants who had at least one SUD-related ED visit decreased slightly, from 12.6 percent in CY 2014 to 12.1 percent in CY 2018.

Table 53. HealthChoice Participants with an Outpatient ED Visit, by SUD Status, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One ED Visit (Any Diagnosis)		At Least One ED Visit with SUD as Primary Diagnosis	
		Number of Participants	Percentage of Total Participants	Number of Participants	Percentage of Total Participants
SUD-Only					
2014	36,067	18,918	52.5%	3,380	9.4%
2015	35,628	18,010	50.6%	3,410	9.6%
2016	37,938	19,251	50.7%	3,407	9.0%
2017	41,632	20,972	50.4%	3,884	9.3%
2018	43,274	20,430	47.2%	3,969	9.2%
Dual Diagnosis (MHD + SUD)					
2014	25,076	17,341	69.2%	4,306	17.2%
2015	27,601	18,685	67.7%	4,833	17.5%
2016	30,646	20,887	68.2%	4,794	15.6%
2017	33,085	22,530	68.1%	5,430	16.4%
2018	34,615	22,663	65.5%	5,437	15.7%
All					
2014	61,143	36,259	59.3%	7,686	12.6%
2015	63,229	36,695	58.0%	8,243	13.0%
2016	68,584	40,138	58.5%	8,201	12.0%
2017	74,717	43,502	58.2%	9,314	12.5%
2018	77,889	43,093	55.3%	9,406	12.1%

Table 54 presents the number and percentage of HealthChoice participants with an SUD who received at least one methadone replacement therapy or at least one medication-assisted treatment (MAT).[37] Overall, the percentage of all participants with an SUD-only who received at least one methadone replacement therapy increased across the evaluation period—from 35.9 percent in CY 2014 to 37.2 percent in CY 2018. The percentage of all participants with an SUD-only who received at least one MAT consistently increased during the evaluation period—from 51.2 percent in CY 2014 to 60.8 percent in CY 2018.

[36] This measure excludes ED visits that resulted in an inpatient hospital admission.
[37] MAT was defined as any treatment with buprenorphine, naloxone, methadone, or naltrexone.

Table 54. Number and Percentage of HealthChoice Participants Who Received Methadone Replacement Therapy or MAT, by SUD Status, CY 2014–CY 2018

Calendar Year	Total Number of Participants	At Least One Methadone Replacement Therapy		At Least One MAT	
		Number of Participants	Percentage of Total Participants	Number of Participants	Percentage of Total Participants
SUD-Only					
2014	36,067	12,964	35.9%	18,474	51.2%
2015	35,628	13,973	39.2%	20,164	56.6%
2016	37,938	15,215	40.1%	22,185	58.5%
2017	41,632	16,344	39.3%	24,830	59.6%
2018	43,274	16,109	37.2%	26,323	60.8%
Dual Diagnosis (MHD + SUD)					
2014	25,076	7,798	31.1%	13,663	54.5%
2015	27,601	8,891	32.2%	15,784	57.2%
2016	30,646	10,132	33.1%	18,374	60.0%
2017	33,085	10,221	30.9%	20,131	60.8%
2018	34,615	10,141	29.3%	21,440	61.9%
All					
2014	61,143	20,762	34.0%	32,137	52.6%
2015	63,229	22,864	36.2%	35,948	56.9%
2016	68,584	25,347	37.0%	40,559	59.1%
2017	74,717	26,565	35.6%	44,961	60.2%
2018	77,889	26,250	33.7%	47,763	61.3%

Section V Conclusion

HealthChoice covers a broad range of populations with low income and various service needs. Therefore, health promotion activities under HealthChoice have an extensive scope. From care for persons with chronic diseases like asthma, diabetes, and HIV infection, to those with behavioral health conditions, most measures of performance are improving. Although the increases in behavioral health use may represent the need for access to care for persons with MHD and or SUD conditions, the Department will monitor the use of services to assure that necessary care is being delivered and that, where possible, prevention and early intervention can minimize the severity and duration of such conditions. The Department considers constant monitoring of performance measures for each aspect of health promotion and disease prevention to be a necessary part of demonstrating the HealthChoice program's effectiveness.

Section VI. Quality of and Access to Care for Special Populations

Another goal of the HealthChoice program is to improve the quality of health services and access to care for special populations. This section of the report assesses services provided to children in foster care, the REM program, access to care stratified by race and ethnicity, and the demographics and health care utilization of the ACA expansion. Unless otherwise stated, all measures in this section are calculated for HealthChoice participants with any period of enrollment during the calendar year.

Children in Foster Care

This section of the report examines service utilization for children in foster care with any period of enrollment in HealthChoice during the calendar year.[38] It also compares service utilization for children in foster care with other HealthChoice children. Unless otherwise specified, the measures presented here are for foster care children from birth through 21 years.

Table 55 displays HealthChoice children in foster care by age group for CY 2014 and CY 2018. Across the evaluation period, children aged 10 to 21 years made up the largest proportion of HealthChoice children in foster care (66.8 percent in CY 2014 and 63.4 percent in CY 2018).

Table 55. HealthChoice Children in Foster Care, by Age Group, CY 2014 and CY 2018

Age Group (Years)	CY 2014		CY 2018	
	Number of Participants	Percentage of Total	Number of Participants	Percentage of Total
0 to <1	199	2.3%	237	2.8%
1–2	687	7.9%	729	8.6%
3–5	791	9.1%	948	11.2%
6–9	1,222	14.0%	1,189	14.0%
10–14	1,637	18.7%	1,735	20.5%
15–18	2,200	25.2%	2,130	25.1%
19–21	2,003	22.9%	1,510	17.8%
Total	**8,739**	**100.0%**	**8,478**	**100.0%**

[38] Children in the subsidized adoption and guardianship programs are excluded from foster children counts.

Figure 15 shows the percentage of HealthChoice children in foster care who did not receive a Medicaid service during the calendar year, by age group. Overall, the percentage of children in foster care who did not receive any services declined across the measurement period. Although the majority of children in foster care became more likely to use Medicaid services during the evaluation period, children aged 10 to 14 and 19 to 21 years became more likely not to use any services.

Figure 15. Percentage of HealthChoice Children in Foster Care Who Received No Medicaid Service, by Age Group, CY 2014 and CY 2018

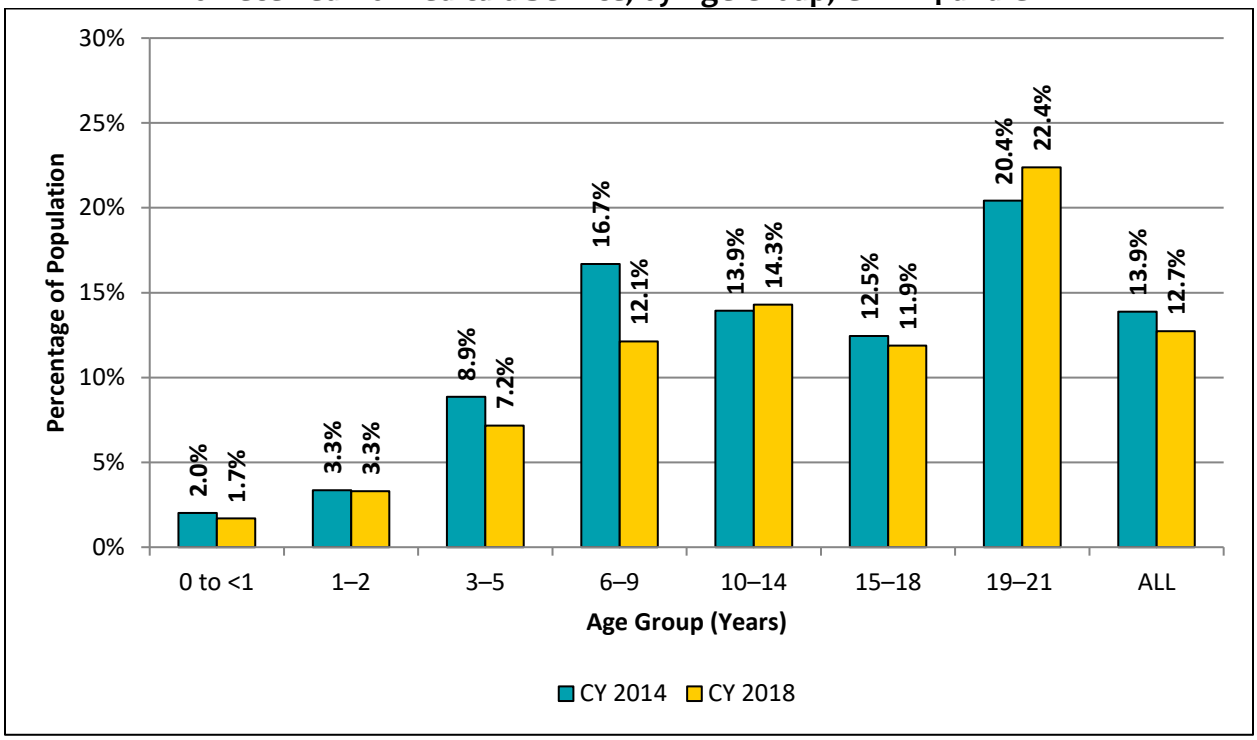


Figure 16 displays the percentage of children in foster care who had at least one ambulatory care visit in CY 2014 and CY 2018, by age group. From CY 2014 to CY 2018, the overall rate of ambulatory care visits increased by 1.8 percentage points. Consistent with the general HealthChoice population, younger children in foster care were more likely than older children to receive ambulatory care services.

Figure 16. Percentage of HealthChoice Children in Foster Care Who Had an Ambulatory Care Visit, by Age Group, CY 2014 and CY 2018

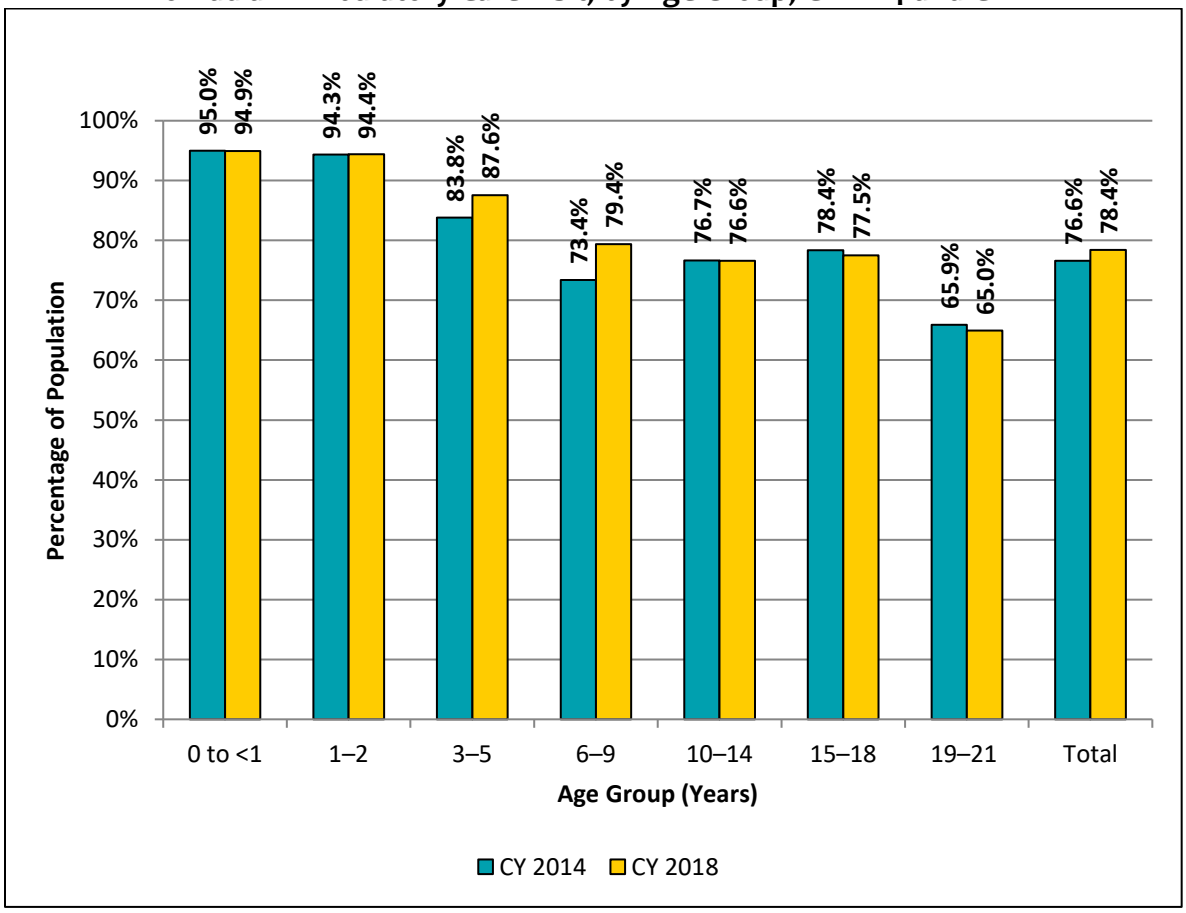


Figure 17 compares the ambulatory care visit rate for foster care children with the rate for non-foster care children enrolled in HealthChoice in CY 2018. Overall, non-foster care children in HealthChoice accessed ambulatory care at a higher rate than did foster care children. However, children in foster care under the age of six years accessed ambulatory care services at a slightly higher rate than other children in HealthChoice.

Figure 17. Percentage of HealthChoice Foster Care Children vs. Non-Foster Care Children Who Had an Ambulatory Care Visit, by Age Group, CY 2018

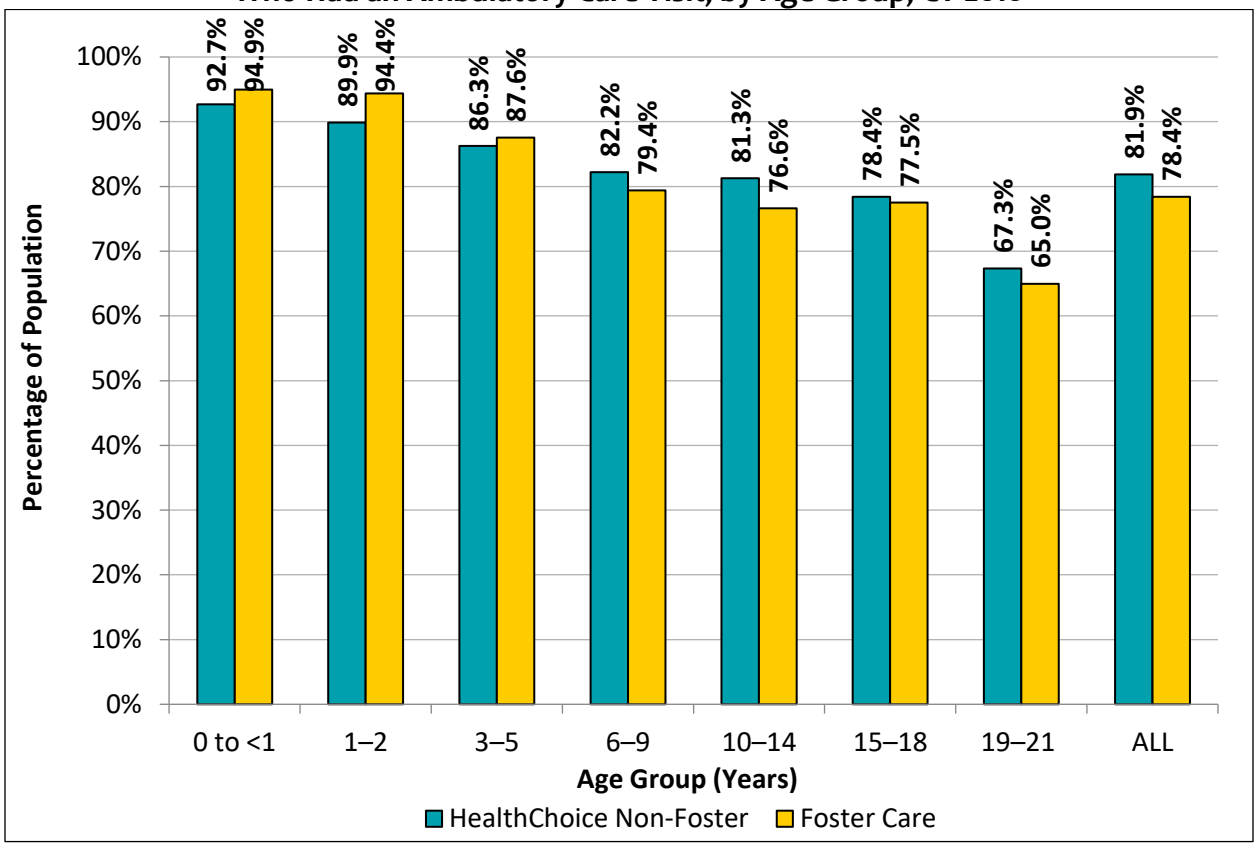
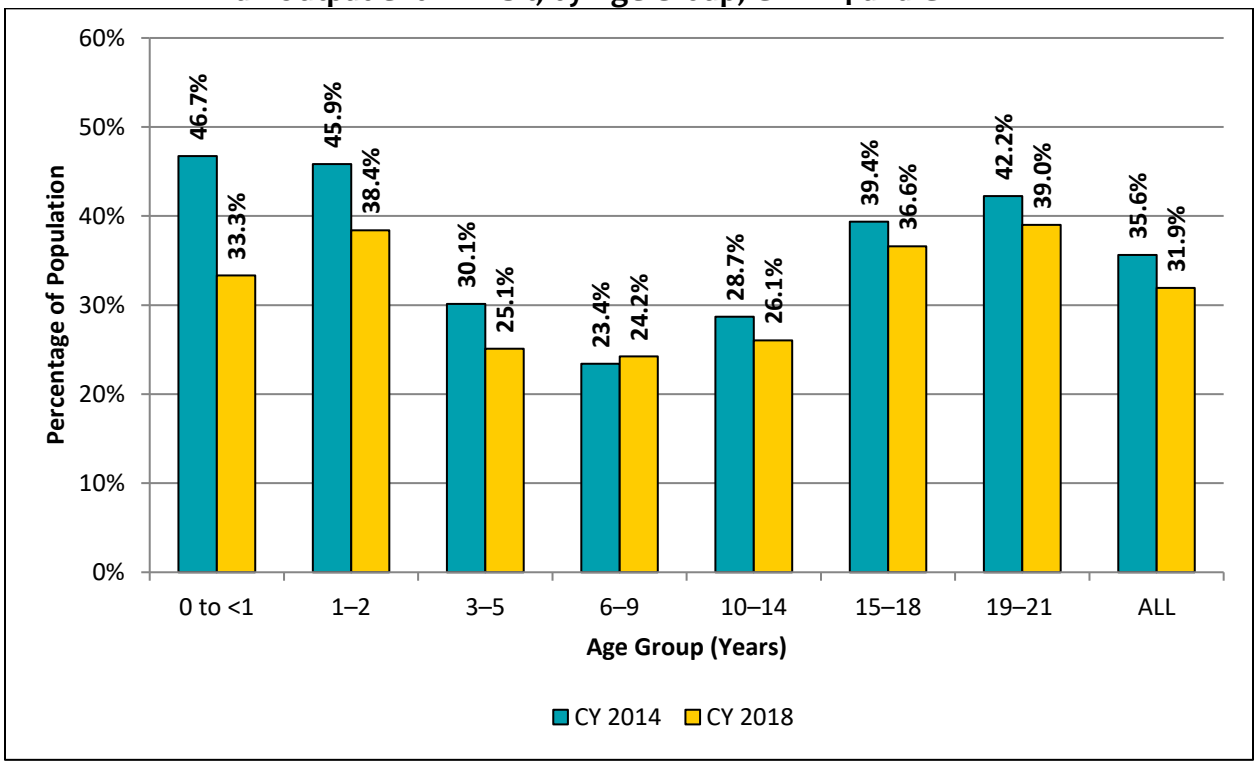


Figure 18 displays the percentage of children in foster care who had at least one outpatient ED visit in CY 2014 and CY 2018, by age group.[39] The overall rate decreased by 3.7 percentage points during the evaluation period. Children aged 1 to 2 years and 19 to 21 years used ED services at the highest rates in CY 2018.

Figure 18. Percentage of HealthChoice Children in Foster Care Who Had an Outpatient ED Visit, by Age Group, CY 2014 and CY 2018



[39] Outpatient ED visits are defined as ED visits for patients who were seen and discharged on an outpatient basis. This measure does not include ED visits that led to an inpatient admission.

Figure 19 compares the outpatient ED visit rate in CY 2018 for foster care children to the rate for non-foster care children enrolled in HealthChoice. Overall, children in foster care accessed the ED at a higher rate than children not in foster care.

Figure 19. Percentage of HealthChoice Foster Care Children vs. Non-Foster Care Children Who Had an Outpatient ED Visit, by Age Group, CY 2018

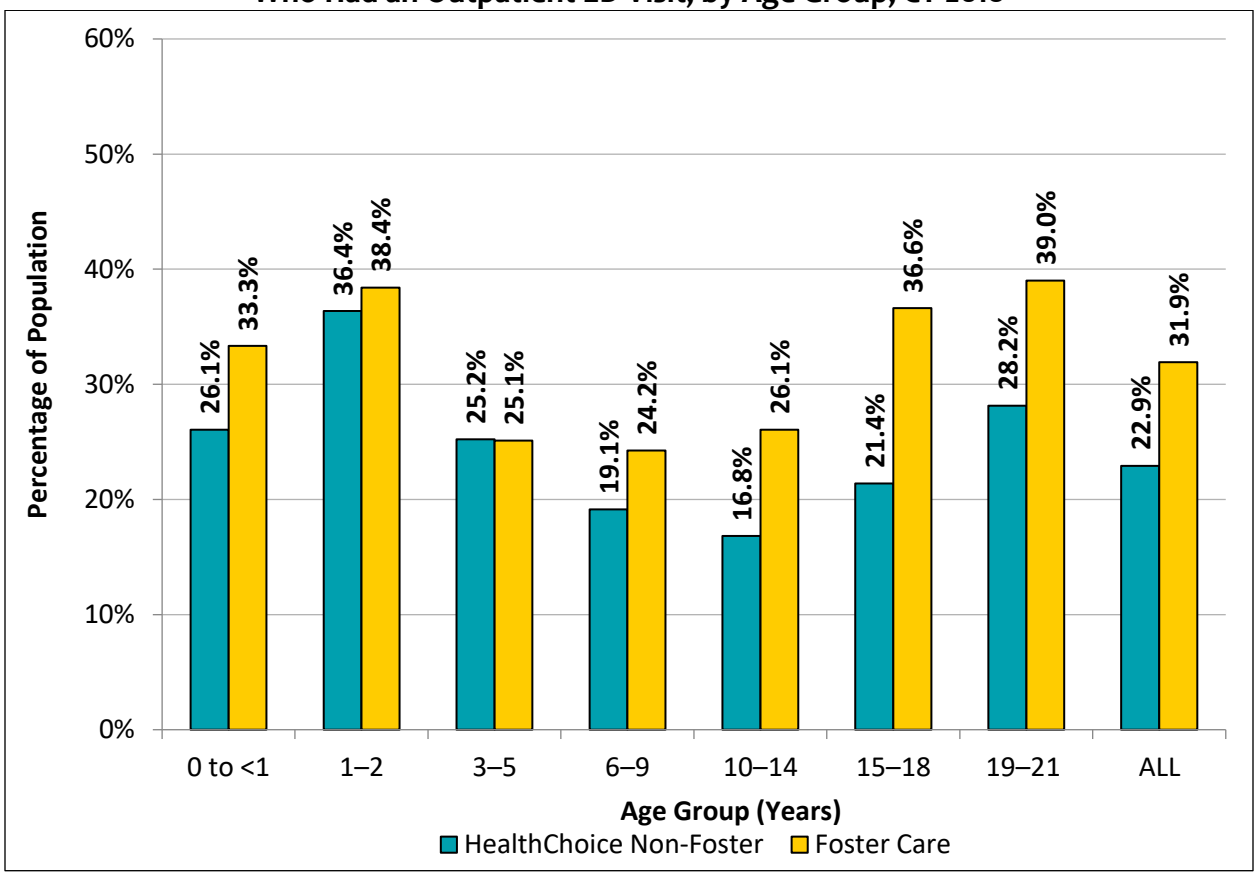


Figure 20 presents the percentage of HealthChoice children in foster care who had at least one inpatient hospital admission in CY 2014 and CY 2018. Across the evaluation period, the overall rate of inpatient hospitalization decreased by 1.1 percent, and decreased for all age groups except for children aged 6 to 14 years. Hospitalization at birth means that the rate of inpatient admissions is near 100 percent for infants aged 0 to one year; therefore, this age group is excluded from the results.

Figure 20. Percentage of HealthChoice Children in Foster Care with at Least One Inpatient Admission, by Age Group, CY 2014 and CY 2018

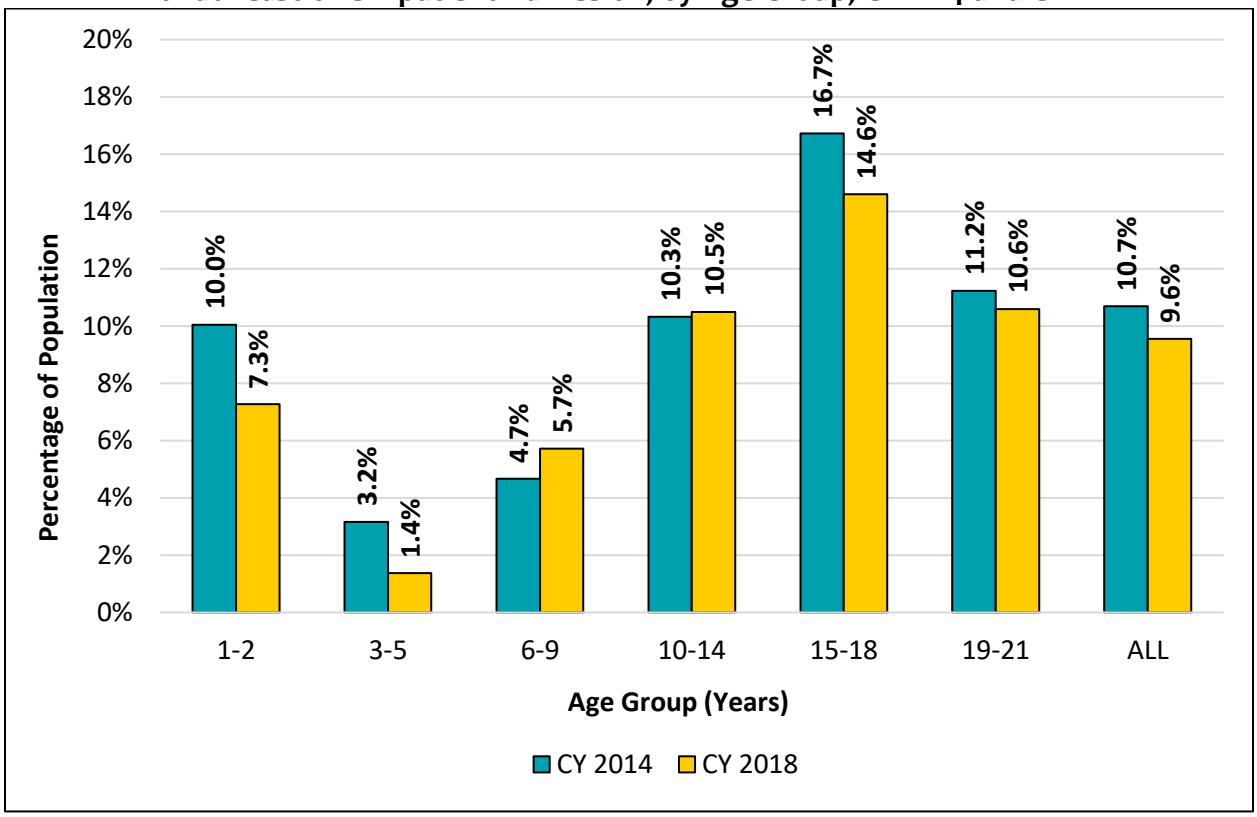


Figure 21 presents the number of non-foster care children enrolled in HealthChoice with at least one inpatient admission compared to foster care children in CY 2018. The rate of inpatient hospitalization was 7.4 percentage points higher for children in foster care than for children not in foster care, and it was consistently higher for foster care children across all age groups.

Figure 21. Percentage of HealthChoice Foster Care Children vs. Non-Foster Care Children with at Least One Inpatient Admission, by Age Group, CY 2018

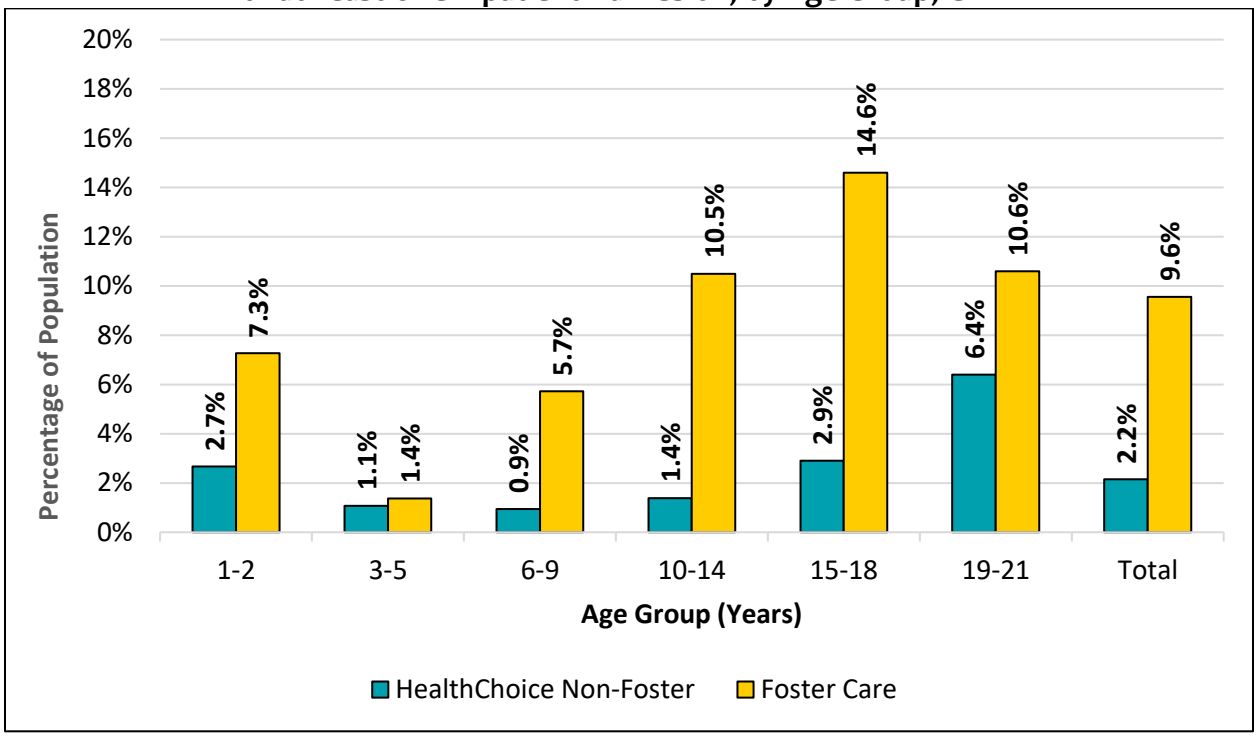


Figure 22 compares the dental utilization rate in CY 2018 for foster care children aged 4 to 20 years to the rate for non-foster care children enrolled in HealthChoice. Overall, children in foster care had a slightly higher dental visit rate (66.4 percent) than other HealthChoice children (62.9 percent). The largest differences between the two populations were observed in the older age groups. The dental visit rate was 52.6 percent for children in foster care aged 19 to 20 years and 38.0 percent for other HealthChoice children: a difference of 14.6 percentage points.

Figure 22. Percentage of HealthChoice Foster Care Children Aged 4–20 Years vs. Non-Foster Care Children Who Had a Dental Visit, by Age Group, CY 2018

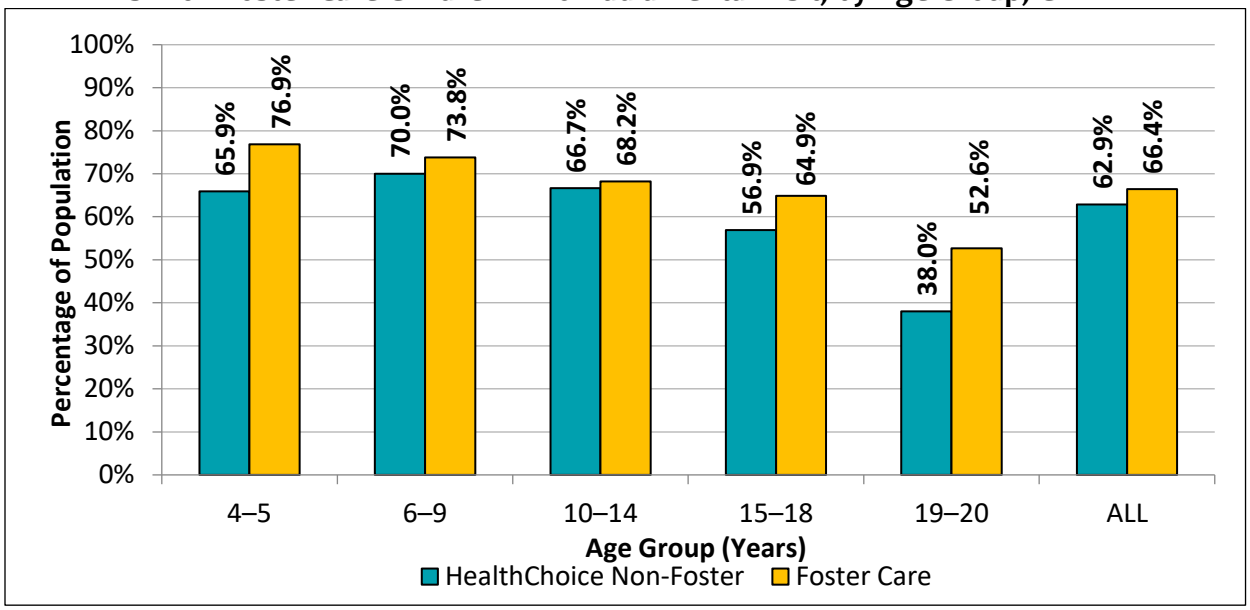


Table 56 shows the rates of MHDs, SUDs, and co-occurring MHD and SUD conditions among foster care and non-foster care HealthChoice participants in CY 2014 and CY 2018. The percentage of participants diagnosed with an MHD-only, SUD-only, or co-occurring MHD and SUD diagnosis were higher among foster care participants than non-foster care HealthChoice participants and were considerably higher among foster care children for MHD-only. The percentage of both foster care and non-foster care participants with an MHD-only increased across the evaluation period. In contrast, the percentage of participants with SUD-only diagnoses decreased slightly from CY 2014 to CY 2018 for both foster care and non-foster care participants. The percentage of participants with a co-occurring MHD and SUD remained stable for non-foster care participants between CY 2014 and CY 2018, while the rate for foster care participants fell by 0.6 percentage points.

Table 56. Behavioral Health Diagnosis of HealthChoice Foster Care Children vs. Non-Foster Care Children Aged 0–21 Years, CY 2014 and CY 2018

Foster Care Status	CY 2014			CY 2018		
	Total Participants	Number of Participants	Percentage of Total	Total Participants	Number of Participants	Percentage of Total
MHD-Only						
Foster Care	8,739	3,563	40.8%	8,478	3,652	43.1%
Non-Foster Care	698,540	61,797	8.8%	735,403	81,432	11.1%
SUD-Only						
Foster Care	8,739	86	1.0%	8,478	57	0.7%
Non-Foster Care	698,540	4,578	0.7%	735,403	3,003	0.4%
Dual Diagnosis (MHD and SUD)						
Foster Care	8,739	280	3.2%	8,478	223	2.6%
Non-Foster Care	698,540	2,121	0.3%	735,403	1,905	0.3%
No Behavioral Health Diagnosis						
Foster Care	8,739	4,810	55.0%	8,478	4,546	53.6%
Non-Foster Care	698,540	630,174	90.2%	735,403	649,179	88.3%

Rare and Expensive Case Management (REM) Program

The REM program provides case management services to Medicaid participants who have a rare and expensive medical condition from a specified list and require sub-specialty care. An individual must be eligible for HealthChoice, have a qualifying diagnosis, and be within the age limit for that diagnosis. Examples of qualifying diagnoses include cystic fibrosis, quadriplegia, muscular dystrophy, chronic renal failure, and spina bifida. REM participants do not receive services through an MCO. The REM program provides the standard FFS Medicaid benefit package and some expanded benefits, such as medically necessary private duty nursing, shift home health aides, and adult dental services. This section of the report presents data on REM enrollment and service utilization.

REM Enrollment

Table 57 presents REM enrollment by age group, sex, and status for children in foster care for CY 2014 and CY 2018. In both years, most REM participants were males aged 18 years or younger. There was a lower percentage of female participants in the REM population than in the general HealthChoice population. The majority of REM participants were not in foster care.

Table 57. REM Enrollment by Age Group, Sex, and Foster Care Status, CY 2014 and CY 2018

Demographic Characteristic	CY 2014		CY 2018	
	Number of Participants	Percentage of Total	Number of Participants	Percentage of Total
Age Group (Years)				
0–18	3,154	68.1%	2,835	65.3%
19 and over	1,475	31.9%	1,505	34.7%
Total	**4,629**	**100.0%**	**4,340**	**100.0%**
Sex/Gender				
Female	2,016	43.6%	1,849	42.6%
Male	2,613	56.4%	2,491	57.4%
Total	**4,629**	**100.0%**	**4,340**	**100.0%**
Foster Care				
Foster Care	376	8.1%	316	7.3%
Non-Foster Care	4,253	91.9%	4,024	92.7%
Total	**4,629**	**100.0%**	**4,340**	**100.0%**

REM Service Utilization

Figure 23 shows the percentage of REM participants who received at least one dental, inpatient, ambulatory care, or outpatient ED visit between CY 2014 and CY 2018. The dental, inpatient, and ambulatory care visit measures serve as indicators of access to care. The percentage of participants with a dental visit increased during the evaluation period, from 51.5 percent in CY 2014 to 55.2 percent in CY 2018. The percentage of REM participants who had an inpatient visit declined by 1.2 percentage points between CY 2014 and CY 2018. Ambulatory care utilization increased by 1.2 percentage points throughout the evaluation period. Outpatient ED visits decreased by 2.2 percentage points over the entire evaluation period; however, the largest decline occurred between CY 2017 and CY 2018, when the rate went from 44.6 to 42.5 percent—a decrease of 2.1 percentage points. Due to the nature of qualifying conditions for the REM program, nearly 100 percent of REM participants received at least one service per year during the evaluation period.

Figure 23. Percentage of REM Participants with a Dental, Inpatient, Ambulatory Care, or Outpatient ED Visit, CY 2014–CY 2018

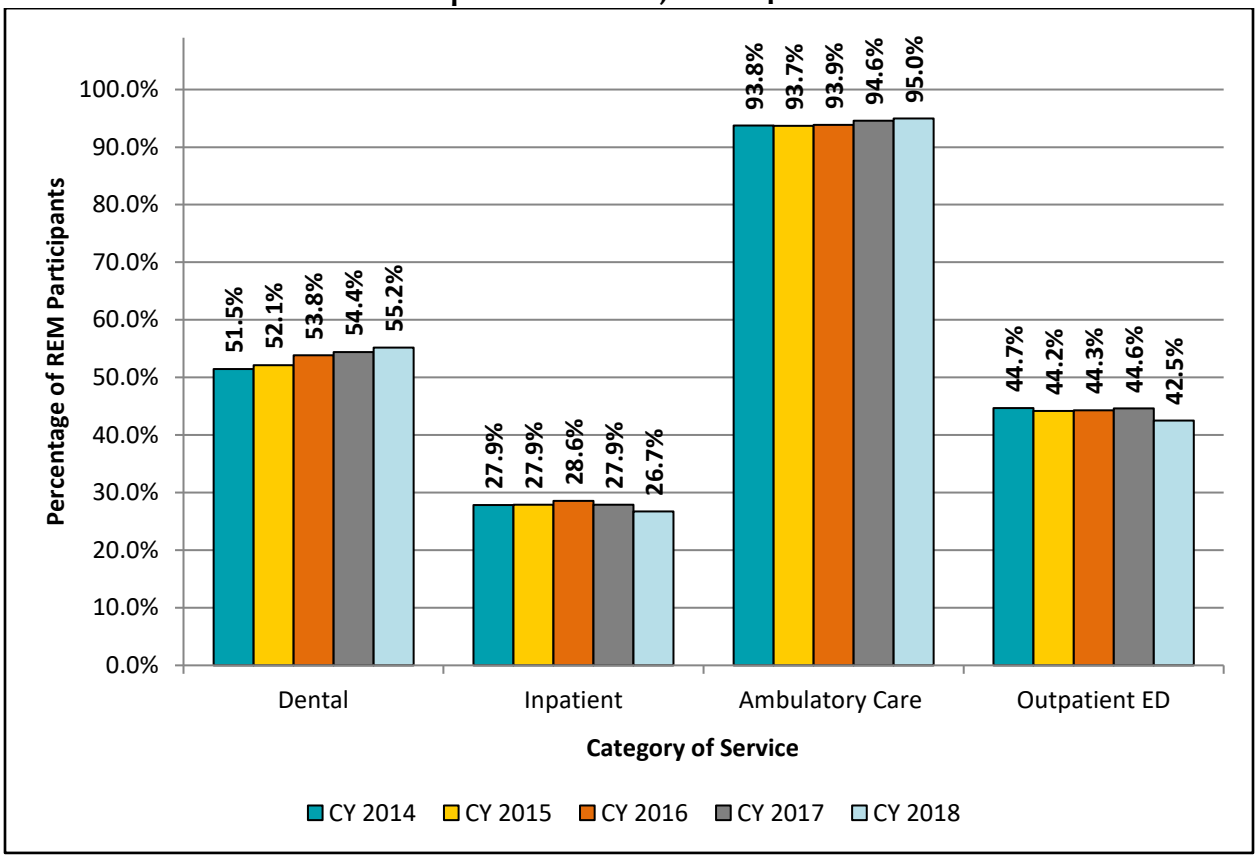


Table 58 shows the behavioral health diagnosis rates among REM participants at the beginning and end of the evaluation period. The percentage of REM participants with an MHD-only diagnosis increased by 3.4 percentage points between CY 2014 and CY 2018, and the rates for SUD-only and dual diagnosis (MHD and SUD) increased slightly. The category of no behavioral health diagnosis decreased by 3.8 percentage points.

Table 58. Behavioral Health Diagnoses of REM Participants, CY 2014 and CY 2018

CY 2014			CY 2018		
Number of Participants	**Total Participants**	**Percentage of Total**	**Number of Participants**	**Total Participants**	**Percentage of Total**
MHD-Only					
744	4,629	16.1%	845	4,340	19.5%
SUD-Only					
135	4,629	2.9%	143	4,340	3.3%
Dual Diagnosis (MHD + SUD)					
33	4,629	0.7%	34	4,340	0.8%
No Behavioral Health Diagnosis					
3,717	4,629	80.3%	3,318	4,340	76.5%

Racial and Ethnic Disparities

Racial and ethnic disparities in health care are nationally-recognized challenges. The Department is committed to improving health services utilization among racial and ethnic groups through its MFR program. The Department's Office of Minority Health and Health Disparities uses MFR to target goals in reducing racial and ethnic disparities. This section of the report presents enrollment trends among racial and ethnic groups and assesses disparities within several measures of service utilization.

When reading this section, please note that there was a substantial change to the quality of the race and ethnicity information beginning with CY 2014. The approach to selecting race and ethnicity on the Medicaid eligibility application changed in Medicaid's new eligibility process. As a result, the number of individuals reporting their race or ethnicity decreased, and the proportion represented as "Other/Unknown" increased sharply.

Enrollment

Table 59 displays HealthChoice enrollment by race and ethnicity. Apart from Hispanic and Black participants, each racial and ethnic group increased in enrollment between CY 2014 and CY 2018.

Table 59. HealthChoice Enrollment by Race/Ethnicity, CY 2014 and CY 2018

Race/Ethnicity	CY 2014		CY 2018	
	Number of Participants	Percentage of Total Race/Ethnicity	Number of Participants	Percentage of Total Race/Ethnicity
Asian	51,473	4.1%	62,905	4.5%
Black	581,830	46.5%	578,924	41.7%
White	370,076	29.6%	376,203	27.1%
Hispanic	127,218	10.2%	110,764	8.0%
Native American	3,344	0.3%	4,047	0.3%
Other	116,693	9.3%	256,873	18.5%
Total	**1,250,634**	**100.0%**	**1,389,716**	**100.0%**

Ambulatory Care Visits

Figure 24 presents the percentage of children aged 0 through 18 years who received at least one ambulatory visit in CY 2014 and CY 2018, by race and ethnicity. The overall rate of ambulatory care visits increased from 82.3 percent in CY 2014 to 83.4 percent in CY 2018. All racial and ethnic groups except for Asians and Native Americans experienced a slight increase throughout the evaluation period. Due to the limited numbers of Native American participants enrolled in the HealthChoice program, small changes in the number of Native American children receiving ambulatory care visits can create large percentage changes compared to racial and ethnic groups with larger shares of the population. In CY 2014, the disparity between the racial/ethnic group

with the highest percentage of ambulatory care visits (Hispanic) and the lowest percentage (Black) was 10.8 percentage points. In CY 2018, this difference increased slightly to 11.0 percentage points.

Figure 24. Percentage of HealthChoice Participants Aged 0–18 Years with an Ambulatory Care Visit, by Race/Ethnicity, CY 2014 and CY 2018

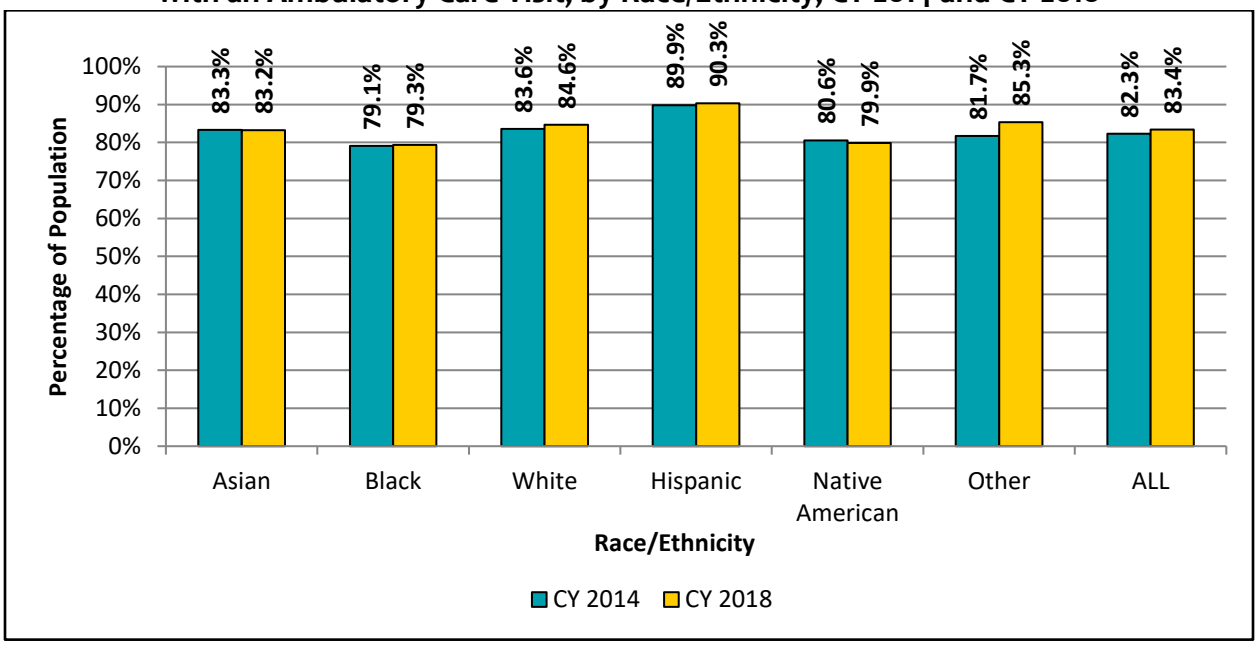
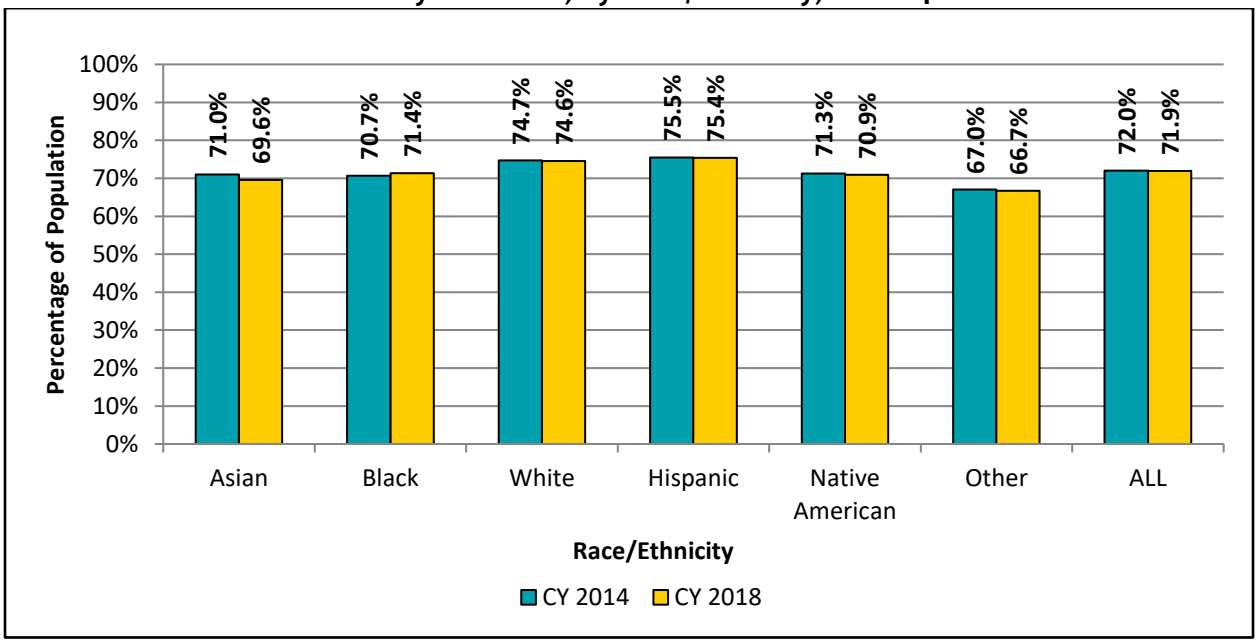


Figure 25 presents the percentage of adults aged 19 to 64 years who received at least one ambulatory care visit in CY 2014 and CY 2018, by race and ethnicity. In CY 2014, 72 percent of adult HealthChoice participants received an ambulatory care visit. The rate of ambulatory care visits decreased slightly to 71.9 percent in CY 2018, with a corresponding decrease observed among all racial and ethnic groups except Black participants.

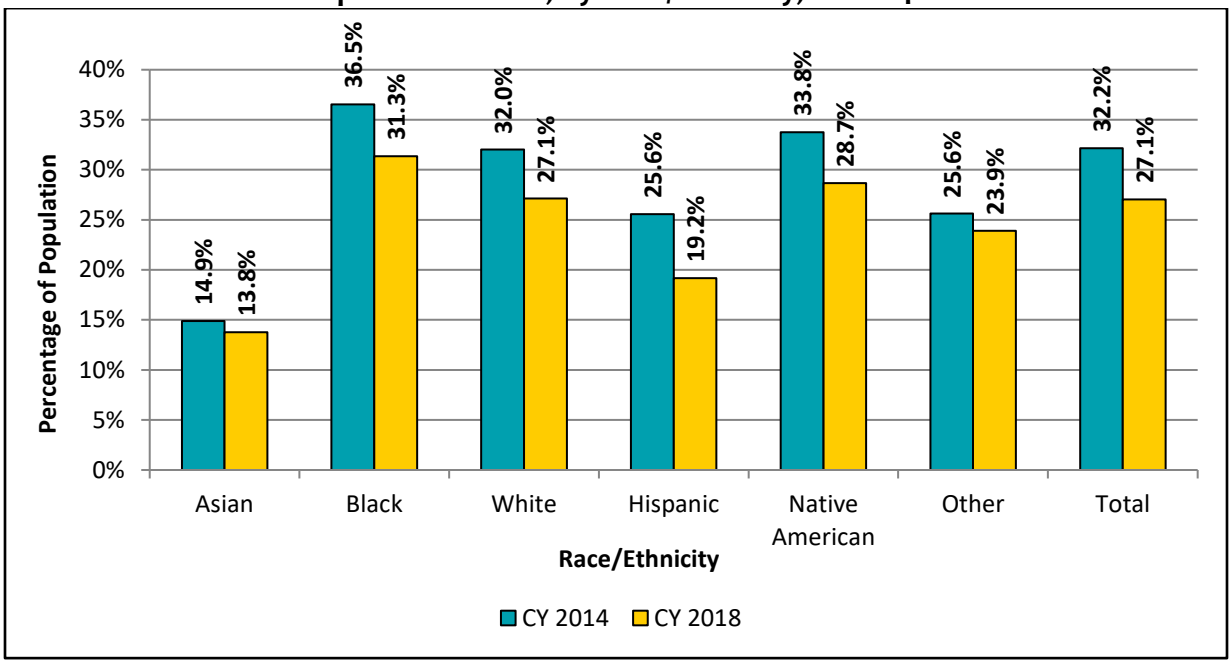
Figure 25. Percentage of HealthChoice Participants Aged 19–64 Years with an Ambulatory Care Visit, by Race/Ethnicity, CY 2014 and CY 2018



Outpatient ED Visits

Figure 26 displays the percentage of HealthChoice participants aged 0 to 64 years who had at least one ED visit by race and ethnicity in CY 2014 and CY 2018. During the evaluation period, each racial and ethnic group experienced a drop in ED services. Black participants continued to have the highest ED visit rate, while Asian participants continued to have the lowest.

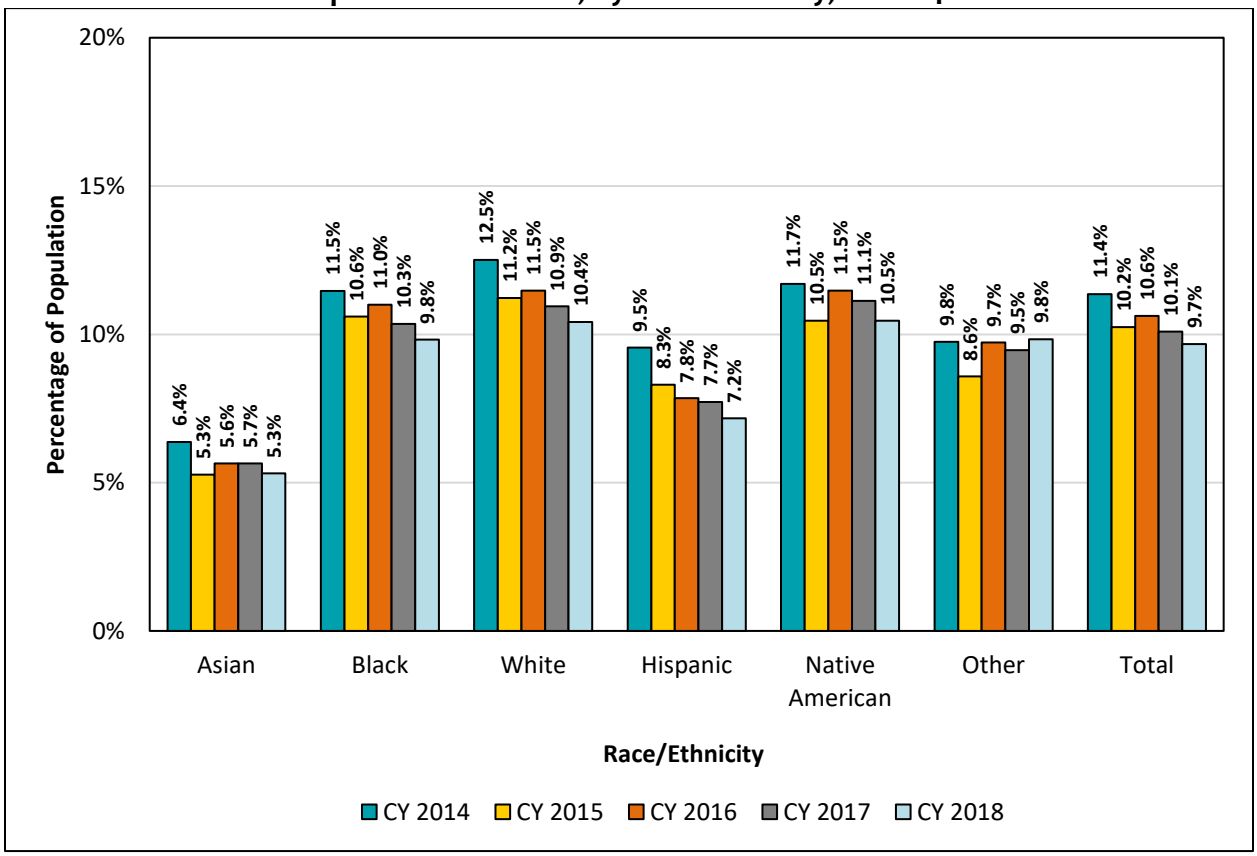
Figure 26. Percentage of HealthChoice Participants Aged 0–64 Years with an Outpatient ED Visit, by Race/Ethnicity, CY 2014 and CY 2018



Inpatient Admissions

Figure 27 presents the percentage of HealthChoice participants aged 18 to 64 years by race and ethnicity who received an inpatient admission between CY 2014 and CY 2018. Each group's rate declined between CY 2014 and CY 2018 with the exception of the "Other/Unknown" group, which remained the same.

Figure 27. Percentage of HealthChoice Participants Aged 18–64 Years with an Inpatient Admission, by Race-Ethnicity, CY 2014–CY 2018



ACA Medicaid Expansion Population

This section of the report examines the demographic characteristics and health care utilization of the ACA Medicaid expansion population between CY 2014 and CY 2018.

The PAC program was launched in 2006, offering a limited benefit package to childless adults aged 19 years and older who were not otherwise eligible for Medicare or Medicaid and whose income was less than or equal to 116 percent of the FPL.[40] Subsequently, under the optional Medicaid expansion in the ACA, states could expand Medicaid eligibility for adults under the age of 65 years with income up to 138 percent of the FPL. Maryland elected to expand Medicaid eligibility, which resulted in the PAC program transitioning into a fully-eligible Medicaid population on January 1, 2014. Therefore, the ACA Medicaid expansion population consists of three different coverage groups:

1. Former PAC participants

[40] The PAC program offered a limited benefit package to adults with low income, covering primary care visits, certain outpatient mental health and SUD services, outpatient ED visits, and prescription drugs.

2. Childless adults not previously enrolled in PAC[41]
3. Parents and caretaker relatives

This section presents demographic and service utilization measures for participants with any enrollment in one of the ACA Medicaid expansion coverage groups. Many of these participants were gaining Medicaid coverage for the first time and had limited health care utilization literacy, resulting in reduced access to care until they become more familiar with accessing care through Medicaid.

ACA Medicaid Expansion Population Demographics

The Maryland Medicaid program enrolled 283,697 adults through the ACA Medicaid expansion in CY 2014. The number of participants who received coverage for at least one month in an ACA expansion coverage group increased to 397,403 in CY 2018.

Table 60 displays demographic characteristics of the expansion population for those with any period of enrollment in CY 2014 through CY 2018. Participants aged 19 to 34 years composed the largest portion of the ACA expansion population.

[41] Though these individuals may have had prior enrollment in PAC, they were not enrolled in PAC as of December 2013. Only participants enrolled in PAC in December 2013 were automatically transferred into a Medicaid expansion coverage group.

Table 60. ACA Medicaid Expansion Population Aged 19–64 Years, by Demographics and Any Enrollment Period, CY 2014–CY 2018

Demographic Characteristic	CY 2014		CY 2015		CY 2016		CY 2017		CY 2018	
	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total
Race/Ethnicity										
Asian	14,680	5.2%	19,469	5.3%	18,270	5.1%	20,344	5.2%	20,980	5.3%
Black	125,828	44.4%	158,659	43.4%	152,532	42.9%	165,673	42.7%	170,306	42.9%
White	103,709	36.6%	130,211	35.6%	127,416	35.9%	135,107	34.8%	134,702	33.9%
Hispanic	7,381	2.6%	11,742	3.2%	11,683	3.3%	13,335	3.4%	14,028	3.5%
Other	32,099	11.3%	45,911	12.5%	45,370	12.8%	53,539	13.8%	57,387	14.4%
Total	**283,697**	**100%**	**365,992**	**100%**	**355,271**	**100%**	**387,998**	**100.0%**	**397,403**	**100.0%**
Sex										
Female	132,442	46.7%	176,731	48.3%	169,710	47.8%	182,629	47.1%	185,902	46.8%
Male	151,255	53.3%	189,261	51.7%	185,561	52.2%	205,369	52.9%	211,501	53.2%
Total	**283,697**	**100%**	**365,992**	**100%**	**355,271**	**100%**	**387,998**	**100.0%**	**397,403**	**100.0%**
Region										
Baltimore City	63,790	22.5%	75,295	20.6%	73,183	20.6%	78,355	20.2%	79,582	20.0%
Baltimore Suburban	78,933	27.8%	104,316	28.5%	103,563	29.2%	113,780	29.3%	116,984	29.4%
Eastern Shore	27,722	9.8%	34,867	9.5%	34,517	9.7%	37,115	9.6%	37,799	9.5%
Southern MD	14,737	5.2%	19,085	5.2%	18,783	5.3%	20,609	5.3%	21,173	5.3%
Washington Suburban	75,962	26.8%	103,187	28.2%	96,027	27.0%	106,174	27.4%	108,865	27.4%
Western MD	22,127	7.8%	28,530	7.8%	28,390	8.0%	31,090	8.0%	32,179	8.1%
Out of State	426	0.2%	712	0.2%	808	0.2%	875	0.2%	821	0.2%
Total	**283,697**	**100%**	**365,992**	**100%**	**355,271**	**100%**	**387,998**	**100.0%**	**397,403**	**100.0%**
***Age Group* (Years)**										
19–34	113,747	40.1%	157,449	43.0%	157,804	44.4%	177,340	45.7%	184,973	46.6%
35–49	75,418	26.6%	95,190	26.0%	87,520	24.6%	93,685	24.2%	96,276	24.2%
50–64	94,538	33.3%	113,353	31.0%	109,947	31.0%	116,973	30.2%	116,154	29.2%
Total	**283,697**	**100%**	**365,992**	**100%**	**355,271**	**100%**	**387,998**	**100.0%**	**397,403**	**100.0%**
Member Months										
1	16,108	5.7%	10,564	2.9%	17,097	4.8%	13,928	3.6%	12,270	3.1%
2	10,093	3.6%	10,207	2.8%	12,954	3.7%	12,460	3.2%	10,760	2.7%
3	7,976	2.8%	41,699	11.4%	9,951	2.8%	9,920	2.6%	10,761	2.7%
4	8,981	3.2%	20,537	5.6%	8,977	2.5%	9,103	2.4%	11,035	2.8%
5	7,629	2.7%	14,514	4.0%	9,139	2.6%	10,162	2.6%	13,062	3.3%
6	7,515	2.7%	12,976	3.6%	9,444	2.7%	9,603	2.5%	12,181	3.1%
7	12,784	4.5%	15,189	4.2%	10,062	2.8%	10,039	2.6%	10,645	2.7%
8	13,895	4.9%	15,505	4.2%	10,833	3.1%	10,603	2.7%	11,849	3.0%
9	19,031	6.7%	16,377	4.5%	11,610	3.3%	11,018	2.8%	11,632	2.9%
10	39,867	14.1%	14,477	4.0%	13,360	3.8%	12,474	3.2%	12,464	3.1%
11	21,563	7.6%	25,265	6.9%	19,167	5.4%	15,093	3.9%	16,228	4.1%
12	118,255	41.7%	168,682	46.1%	222,677	62.7%	263,595	67.9%	264,516	66.6%
Total	**283,697**	**100%**	**365,992**	**100%**	**355,271**	**100%**	**387,998**	**100.0%**	**397,403**	**100.0%**

Table 61 displays demographic characteristics of the expansion population with a full 12 months of enrollment in CY 2014 through CY 2018. The racial and regional distribution is similar to the expansion population with any period of enrollment. In CY 2014, participants aged 50 to 64 years composed the largest portion of the ACA expansion population with 12 months of enrollment. However, similar to those with any period of enrollment, by CY 2018, participants aged 19 to 34 years composed the largest portion of the ACA expansion population with 12 months of enrollment.

Table 61. ACA Medicaid Expansion Population Demographics for Participants Aged 19–64 Years, 12 Months of Enrollment, CY 2014–CY 2018

Demographic Characteristic	CY 2014		CY 2015		CY 2016		CY 2017		CY 2018	
	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total	# of Participants	% of Total
Race/Ethnicity										
Asian	6,176	5.2%	9,245	5.5%	11,764	5.3%	13,689	5.2%	13,757	5.2%
Black	53,201	45.0%	71,433	42.4%	96,225	43.2%	116,103	44.0%	116,955	44.2%
White	46,509	39.3%	65,172	38.6%	82,122	36.9%	93,301	35.4%	91,318	34.5%
Hispanic	3,371	2.9%	5,829	3.5%	7,723	3.5%	9,081	3.4%	9,222	3.5%
Other	8,998	7.6%	17,003	10.1%	24,843	11.2%	31,421	11.9%	33,264	12.6%
Total	**118,255**	**100%**	**168,682**	**100%**	**222,677**	**100%**	**263,595**	**100%**	**264,516**	**100%**
Sex										
Female	61,213	51.8%	90,271	53.5%	110,197	49.5%	125,907	47.8%	124,280	47.0%
Male	57,042	48.2%	78,411	46.5%	112,480	50.5%	137,688	52.2%	140,236	53.0%
Total	**118,255**	**100%**	**168,682**	**100%**	**222,677**	**100%**	**263,595**	**100%**	**264,516**	**100%**
Region										
Baltimore City	27,754	23.5%	35,615	21.1%	47,279	21.2%	56,187	21.3%	56,391	21.3%
Baltimore Suburban	33,062	28.0%	49,413	29.3%	64,706	29.1%	76,786	29.1%	77,767	29.4%
Eastern Shore	12,577	10.6%	17,707	10.5%	22,574	10.1%	25,896	9.8%	25,735	9.7%
Southern Maryland	6,346	5.4%	9,021	5.4%	11,920	5.4%	14,203	5.4%	14,117	5.3%
Washington Suburban	28,529	24.1%	42,572	25.2%	57,669	25.9%	68,901	26.1%	68,947	26.1%
Western Maryland	9,809	8.3%	14,089	8.4%	18,105	8.1%	21,093	8.0%	21,105	8.0%
Out of State	178	0.2%	265	0.2%	424	0.2%	529	0.2%	454	0.2%
Total	**118,255**	**100%**	**168,682**	**100%**	**222,677**	**100%**	**263,595**	**100%**	**264,516**	**100%**
***Age Group* (Years)**										
19–34	42,096	35.6%	63,047	37.4%	94,136	42.3%	116,572	44.2%	118,398	44.8%
35–49	33,038	27.9%	46,217	27.4%	55,774	25.1%	65,267	24.8%	65,144	24.6%
50–64	43,121	36.5%	59,418	35.2%	72,767	32.7%	81,756	31.0%	80,974	30.6%
Total	**118,255**	**100%**	**168,682**	**100%**	**222,677**	**100%**	**263,595**	**100%**	**264,516**	**100%**

ACA Medicaid Expansion Population Service Utilization

This section presents the health care utilization of participants who received Medicaid coverage through the ACA Medicaid expansion. Table 62 displays the number and percentage of participants who had an ambulatory visit, outpatient ED visit, or inpatient admission in CY 2014 through CY 2018 with any period of enrollment as well as 12 months of enrollment. ACA Medicaid expansion participants with 12 continuous months of enrollment provide an MCO with more time and opportunities to intervene in their health care compared to participants with any period of enrollment. Key findings from Table 62, below, include the following:

- In CY 2014, roughly 61 percent of ACA Medicaid expansion participants with any period of enrollment had an ambulatory care visit; the rate increased to roughly 67.0 percent in CY 2018. Visit rates decreased over the evaluation period for expansion participants enrolled for the entire year. Among those with 12 months of enrollment, 80.9 percent of participants in CY 2014 and 75.8 percent of participants in CY 2018 had an ambulatory care visit.
- In CY 2014, 31.4 percent of ACA Medicaid expansion participants with any period of enrollment had an outpatient ED visit. This rate increased to 39.6 percent for those enrolled for the entire year. Similar rates were observed in CY 2015 through CY 2017. However, in CY 2018 the percentage of ACA Medicaid expansion participants who had an ED visit decreased to 29.3 percent for participants with any period of enrollment and 33.5 percent for those enrolled for the entire year.
- Overall, 9.4 percent of ACA Medicaid expansion participants with any period of enrollment had an inpatient admission in CY 2014, decreasing to 8.4 percent in CY 2018. Participants who were enrolled for the entire year experienced a higher rate of inpatient admissions; their rates were 11.9 percent in CY 2014 and 9.2 percent in CY 2018.

Table 62. Service Utilization of ACA Medicaid Expansion Population Aged 19–64 Years, by Enrollment Period, CY 2014–CY 2018

Enrollment Period	CY 2014			CY 2015			CY 2016			CY 2017			CY 2018		
	# of Users	# of Participants	% of Total	# of Users	# of Participants	% of Total	# of Users	# of Participants	% of Total	# of Users	# of Participants	% of Total	# of Users	# of Participants	% of Total
Ambulatory Care Visits															
Any Period	174,293	283,697	61.4%	225,794	365,992	61.7%	236,729	355,271	66.6%	257,280	387,998	66.3%	132,693	397,403	66.6%
12 Months	95,639	118,255	80.9%	138,728	168,682	82.2%	172,901	222,677	77.7%	197,885	263,595	75.1%	200,499	264,516	75.8%
Outpatient ED Visits															
Any Period	89,029	283,697	31.4%	110,071	365,992	30.1%	114,624	355,271	32.3%	120,342	387,998	31.0%	281,010	397,403	29.3%
12 Months	46,838	118,255	39.6%	65,587	168,682	38.9%	82,894	222,677	37.2%	93,130	263,595	35.3%	88,507	264,516	33.5%
Inpatient Admissions															
Any Period	26,573	283,697	9.4%	31,087	365,992	8.5%	32,622	355,271	9.2%	34,303	387,998	8.8%	33,421	397,403	8.4%
12 Months	14,028	118,255	11.9%	19,088	168,682	11.3%	22,670	222,677	10.2%	25,203	263,595	9.6%	24,248	264,516	9.2%

ACA Medicaid Expansion Population with Mental Health and Substance Use Disorders

This section presents the rates of behavioral health diagnoses among ACA expansion participants. Table 63 shows the rates of MHDs, SUDs, and co-occurring MHD and SUD conditions among ACA Medicaid expansion participants aged 19 to 64 years. Rates are shown for those with any period of enrollment and 12 months of enrollment in CY 2014 through CY 2018.

The percentages of participants diagnosed with an MHD, SUD, or co-occurring MHD and SUD were higher among participants who were enrolled for a 12-month period than participants with any period of enrollment. However, the difference narrows across the evaluation period for all participant groups. For participants with an MHD-only, the difference between participants who were enrolled for a 12-month period and participants who were enrolled for any period decreased by 2.2 percent points from CY 2014 to CY 2018. The percentage of participants with any period of enrollment and an MHD-only increased slightly (by 1.3 percentage points) across the evaluation period. The percentage of participants with any period of enrollment and an SUD was 6.7 percent in CY 2014 and increased slightly to 6.9 percent in CY 2018. The percentage of participants with any period of enrollment and a dual diagnosis also increased slightly (by 0.7 percentage points).

Table 63. Behavioral Health Diagnosis of ACA Medicaid Expansion Population Aged 19–64 Years, by Enrollment Period, CY 2014–CY 2018

Enrollment Period	CY 2014			CY 2015			CY 2016			CY 2017			CY 2018		
	# of Participants	Total Participants	% of Total	# of Participants	Total Participants	% of Total	# of Participants	Total Participants	% of Total	# of Participants	Total Participants	% of Total	# of Participants	Total Participants	% of Total
MHD-Only															
Any Period	26,774	283,697	9.4%	35,123	365,992	9.6%	37,637	355,271	10.6%	40,635	387,998	10.5%	42,558	397,403	10.7%
12 Months	15,504	118,255	13.1%	22,559	168,682	13.4%	27,742	222,677	12.5%	31,291	263,595	11.9%	32,129	264,516	12.2%
SUD-Only															
Any Period	18,911	283,697	6.7%	21,529	365,992	5.9%	23,739	355,271	6.7%	26,450	387,998	6.8%	27,258	397,403	6.9%
12 Months	10,234	118,255	8.7%	12,518	168,682	7.4%	16,717	222,677	7.5%	20,400	263,595	7.7%	20,818	264,516	7.9%
Dual Diagnosis (MHD and SUD)															
Any Period	12,666	283,697	4.5%	15,899	365,992	4.3%	18,100	355,271	5.1%	19,815	387,998	5.1%	20,719	397,403	5.2%
12 Months	8,356	118,255	7.1%	11,252	168,682	6.7%	14,501	222,677	6.5%	16,545	263,595	6.3%	17,159	264,516	6.5%
No Behavioral Health Diagnosis															
Any Period	225,346	283,697	79.4%	293,441	365,992	80.2%	275,795	355,271	77.6%	301,098	387,998	77.6%	90,535	397,403	77.2%
12 Months	84,161	118,255	71.2%	122,353	168,682	72.5%	163,717	222,677	73.5%	195,359	263,595	74.1%	194,410	264,516	73.5%

Section VI Conclusion

HealthChoice is prioritizing the delivery of and access to quality health services to special populations such as children in foster care and the REM program, as well as reducing racial and ethnic disparities. Utilization of services among these special populations were largely consistent with utilization trends of the overall HealthChoice population. Over the evaluation period, the percentage of children in foster care who received an ambulatory service increased while utilization of the ED and inpatient admissions decreased. However, the outpatient ED visits and inpatient admissions were higher for children in foster care than for children not in foster care in CY 2018. The percentage of REM participants with a dental visit and ambulatory care during the evaluation period also increased.

Section VII. Expanding Coverage to Additional Low-Income Marylanders with Resources Generated through Managed Care Efficiencies

§1115 demonstrations, like HealthChoice, can use calculated cost savings under budget neutrality provisions to fund a federal match for services otherwise not covered by Medicaid. In addition to testing the effectiveness of a managed care program to improve health outcomes and generate expenditure savings, the HealthChoice demonstration has the opportunity to test new services anticipated to benefit the enrolled population. This section of the report analyzes the innovative programs designed to address the social determinants of health and improve the health and wellbeing of the Maryland population using savings from the HealthChoice managed care program. These programs include Residential Treatment for Individuals with SUD; the HVS and ACIS; dental services for former foster care individuals; Increased Community Services (ICS); and the Family Planning program.

In mid-2018, the Department submitted an amendment to the currently approved waiver, containing requests to expand the Residential Treatment for Individuals with SUD and ACIS programs, provide dental services to dually eligible adults, implement the National Diabetes Prevention Program, and adjust the criteria for the Family Planning Program. The waiver amendment application was approved in March 2019. In mid-2019, the Department submitted an amendment request to implement a Collaborative Care program, which was approved in April 2020.

Residential Treatment for Individuals with SUD

In 2016, CMS approved Maryland Medicaid to expand coverage to include SUD treatment in IMDs. Effective July 1, 2017, the approval permitted otherwise-covered services to be provided to Medicaid-eligible individuals aged 21 to 64 who are enrolled in an 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 3.7-WM (licensed as 3.7D in Maryland) for up to two non-consecutive 30-day stays annually. Table 64 displays IMD utilization for individuals aged 21 and older under the HealthChoice demonstration from FY 2018 through FY 2019 (July 2017 through June 2019). The number of unique users of IMD services increased by 21.3 percent during the evaluation period.

Table 64. Utilization of Residential Treatment for SUDs, FY 2018 and FY 2019

Level of Service	FY 2018		FY 2019	
	Recipient Count	Service Count	Recipient Count	Service Count
Level 3.7-WM	4,650	29,334	5,125	31,098
Level 3.7	5,689	87,097	6,126	96,343
Level 3.5	1,873	37,478	2,926	61,307
Level 3.3	1,243	32,484	1,566	36,840
All Unique Users*	**8,747**	**186,393**	**10,611**	**225,588**

*Please note that the unique total number of users does not equal the sum of all recipients. The unique number of users had at least one service and some recipients had more than one service.

On January 1, 2019, the Department phased in coverage of ASAM level 3.1 and intends to extend coverage to individuals dually eligible for Medicare and Medicaid by January 1, 2020. The Department received approval for a waiver amendment to allow coverage for ASAM level 4.0 for beneficiaries with a primary SUD and a secondary MHD, effective July 1, 2019.

Evidence-Based Home Visiting Services Community Health Pilot

The HVS Pilot program is based on two evidence-based models focused on the health of pregnant women: Nurse Family Partnership and Healthy Families America (HFA). HVS expands evidence-based home visiting services to Medicaid-eligible high-risk pregnant women and children up to age two. Each HVS pilot program is managed locally by a lead local governmental entity (lead entity) that can fund 50 percent of total HVS pilot costs, provide leadership, and coordinate with key community partners to implement the pilot. Each lead entity may also identify other entities that will participate and assist the lead entity in providing services in the HVS pilot (participating entities).

In 2017, the Department approved the first lead entity—Harford County Health Department—to provide home visiting services for up to 30 families under the HVS pilot. A second applicant—Garrett County Health Department—was approved in 2018 to serve up to 13 families. The application and review process for the HVS Pilot is now closed. Each lead entity chose to implement the HFA model, which uses home visits to assess the family's needs and provides resources for the health and wellbeing of the child and caregiver. The HVS Pilot program allows participants to receive services until the child's second birthday.

The Department and The Hilltop Institute monitor and evaluate the health and services provided to each participant in the HVS pilot. Table 65 lists the evaluation measures used for the HVS program participants.

Table 65. HVS Annual Evaluation Measures

Measure	Mother	Child
Depression screening	✓	
Treatment for a behavioral health condition	✓	
Ambulatory care visit by behavioral health condition	✓	
Initiation and engagement of alcohol and other drug dependence treatment (IET)	✓	
Receipt of an oral contraceptive prescription	✓	
Postpartum visit	✓	
Well-care visit		
Emergency department visit		✓
ED Visit for Injury, poisoning, or trauma		✓
Receipt of NICU services		✓
Inpatient admission		✓
Inpatient admission for injury, poisoning, or trauma		✓
Dental visit*		✓
Blood lead screening*		✓
Very low birth rate kick payment	✓	✓

*Cannot be assessed at this time. Enrollees have not reached the recommended age.

A total of 30 participants enrolled in the HVS Pilot program in CY 2018. Since the HVS population is relatively small, the results are not shown.

Assistance in Community Integration Services Community Health Pilot

The ACIS Pilot program provides case management support services and housing case management services to an at-risk population that meets the needs-based criteria for health and housing. Housing case management includes assisting participants in connecting with health care and social service providers and supporting the acquisition of independent living skills. Tenancy-based case management refers to assisting participants in obtaining the services of state and local housing programs to locate and support the individual's medical needs in the home.[42]

Participation in ACIS is capped at 300 individuals annually. In July 2018, the Department sought a waiver amendment to expand ACIS with an additional 300 participant spaces. This was approved in April 2019. Thus, the new statewide capacity is 600 spaces. Similar to the HVS pilot, each ACIS pilot program is managed by a lead entity that funds 50 percent of total pilot costs with local dollars, provides leadership, and coordinates with key community partners—including participating entities—to implement the pilots.

[42] See Assistance in Community Integration Services Pilot Protocol at https://mmcp.health.maryland.gov/Documents/HealthChoice%20Community%20Pilots/Attachment%20E%20-%20FINAL%20MD%20HealthChoice%20STCs%20with%20Approved%20ACIS%20protocol%2006162017.2.pdf

The Department currently oversees four lead entities in the implementation of ACIS Pilots:

- Baltimore City Mayor's Office of Homeless Services: 200 individuals
- Montgomery County Department of Health and Human Services: 110 individuals
- Cecil County Health Department: 15 individuals
- Prince George's County Health Department: 75 individuals

In July 2019, the Department released a third round of ACIS Pilot Request for Applications for the remaining available spaces. The Department and The Hilltop Institute are monitoring and evaluating the ACIS pilot. The evaluation measures used for the ACIS program participants are as follows:

- Programmatic Data Summary Measures
    - Distribution of general and specific living situations at enrollment
    - Distribution of services delivered
    - Distribution of living situation at time of service event delivery
    - Distribution of discharge reason/destination
- Health Service Utilization Measures
    - Any ED visits
    - Any avoidable ED visits
    - Any inpatient admissions
    - Any MHD inpatient admissions
    - Any SUD inpatient admissions
    - Any ambulatory visits
    - Any MHD ambulatory visits
    - Any SUD ambulatory visits
    - Any nursing facility admissions
    - MHD inpatient admissions as defined by HEDIS, with follow-up at 7 and/or 30 days at a mental health provider

During CY 2018, the four lead entities enrolled a total of 107 participants during CY 2018. Since the ACIS population is relatively small, the results are not shown.

Dental Services for Former Foster Care Individuals

Chapters 57 and 58 of the Maryland Acts of 2016 (SB 252/HB 511) authorized Medicaid to cover dental services for former foster care participants until they reach age 26. They also required

Medicaid to apply to CMS for the necessary waiver to receive a federal match for these services. CMS authorized this benefit as part of the 2016 waiver renewal, and Maryland has provided dental services as a benefit to former foster care individuals since January 1, 2017.

Table 66 shows the number and percentage of former foster care participants who were enrolled in Medicaid for at least 320 days and who received dental services in CY 2017 and CY 2018. The percentage of former foster care participants who had at least one dental visit increased slightly between CY 2017 and CY 2018. In CY 2018, the percentage of visits across regions varied from 19.3 percent to 25.4 percent. The Department anticipates that, over time, the number and percentage of former foster care participants receiving services will continue to increase.

Table 66. Number and Percentage of Former Foster Care Participants Enrolled in Medicaid for 320 Days Who Had Dental Services, by Region, CY 2017–CY 2018

Region*	CY 2017			CY 2018		
	Total Number of Participants	Number with at Least One Visit	Percentage with Dental Visits	Total Number of Participants	Number with at Least One Visit	Percentage with Dental Visits
Baltimore City	563	108	19.2%	540	104	19.3%
Baltimore Suburban	374	88	23.5%	339	86	25.4%
Eastern Shore	*	*	23.3%	*	*	24.3%
Southern Maryland	*	*	19.4%	*	*	25.0%
Washington Suburban	173	43	24.9%	161	37	23.0%
Western Maryland	100	23	23.0%	91	22	24.2%
Total	**1,331**	**289**	**21.7%**	**1,237**	**275**	**22.2%**

*Cell values of 10 or less have been suppressed.

Table 67 shows the number and percentage of former foster care participants who had an outpatient ED visit with a dental diagnosis by region in CY 2017 and CY 2018. Overall, the percentage of former foster care participants who had an ED visit with a dental diagnosis decreased from 4.0 to 3.5 percent from CY 2017 to CY 2018. Participants living in Baltimore City used ED services at the highest rate at 4.9 percent in CY 2017; however, the rate remained stable in CY 2018. Eastern Shore used ED services at the highest rate of 6.9 percent in CY 2018; an increase of 2.3 percentage points from CY 2017.

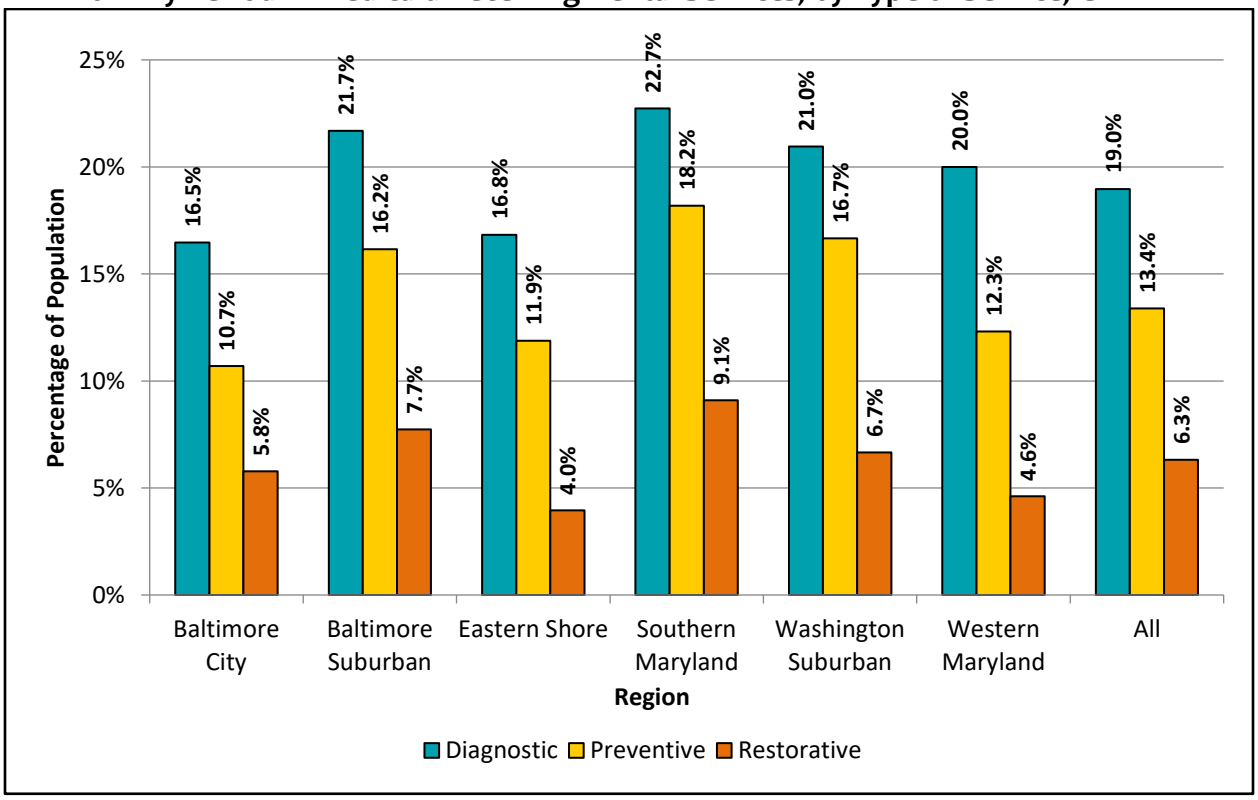
Table 67. Number and Percentage of Former Foster Care Participants Enrolled in Medicaid for Any Period with an Outpatient ED Visit with Any Dental Diagnosis, by Region, CY 2017–CY 2018

Region*	CY 2017			CY 2018		
	Total Number of Participants	Total with at Least One ED Visit	Percentage with One ED Visit	Total Number of Participants	Total with at Least One ED Visit	Percentage with One ED Visit
Baltimore City	750	37	4.9%	692	34	4.9%
Baltimore Suburban	457	15	3.3%	452	13	2.9%
Eastern Shore	*	*	4.6%	*	*	6.9%
Southern Maryland	*	*	0.0%	*	*	4.5%
Washington Suburban	*	*	3.8%	*	*	0.0%
Western Maryland	*	*	2.4%	*	*	0.8%
Total	**1,687**	**68**	**4.0%**	**1,629**	**57**	**3.5%**

*Cell values of 10 or less have been suppressed.

Figure 28 shows the percentage of participants by region and type of service for CY 2018 enrolled for any period. Overall, 19.0 percent received diagnostic services, 13.4 percent received preventive services, and 6.3 percent received restorative services. The Department expects the share of preventive and diagnostic services to increase and the percent of restorative services to decrease as more participants receive dental services on a regular basis.

Figure 28. Percentage of Former Foster Care Participants by Region Enrolled for Any Period in Medicaid Receiving Dental Services, by Type of Service, CY 2018



Increased Community Services

The ICS program provides cost-effective home- and community-based services (HCBS) to certain adults with physical disabilities as an alternative to institutional care in a nursing facility. Similar to the Department's Community Options §1915(c) waiver in all aspects except financial eligibility, the ICS program was initially approved as part of the HealthChoice demonstration in 2009. The 2016 waiver renewal expanded the program from 30 to 100 potential participants. The ICS program aims to provide quality services for individuals in the community, ensure the safety and wellbeing of the participants, and increase opportunities for self-advocacy and self-reliance. The number of participants in the ICS program increased from 12 in CY 2013 to 34 in December 2018.

The Department monitors the health, welfare, and services rendered to each participant to ensure timely and quality provision of care. As the ICS population is relatively small, the quality plan has been successfully implemented, and no areas are in need of improvement at this time. The Department monitors several measures, which all had 100 percent compliance. All participants from CY 2016 (when results became available) to CY 2018 had a plan of service (POS) that addresses health and safety risk factors. All participants signed a Freedom of Choice waiver instead of individually selecting institutional care, services, and providers. All of the Designated Supports Planning Supervisors received annual training to identify, address, and prevent abuse, neglect, and exploitation. In addition, all supervisors received annual training on falls prevention.

Family Planning Program

The HealthChoice waiver allows the Department to provide a limited benefit package of family planning services to eligible participants. In CY 2017, women younger than 51 years of age—regardless of postpartum status—who were not otherwise eligible for Medicaid, CHIP, or Medicare and who had a family income at or below 200 percent of the FPL were eligible.

As of July 1, 2018, the Department expanded eligibility under its Family Planning Program to lift the age limit, open coverage to men, and cover services for postpartum individuals. The Department submitted a §1115 waiver amendment to transition authority for the program to a State Plan Amendment (SPA) on July 2, 2018, and submitted a matching SPA with an effective date of July 1, 2018, to CMS. Based on negotiations with CMS, the Department operated a small portion of its Family Planning program under the HealthChoice waiver until the Family Planning Program was fully integrated into MHC on February 1, 2020.

Specifically, the §1115 waiver allows women to receive full Medicaid benefits for two months postpartum. Those who no longer qualify for Medicaid pregnancy benefits after the end of the postpartum period because they exceed income limits will be automatically-enrolled in the Family Planning program for 12 months. After 12 months, these women can re-apply for benefits to continue their enrollment in Family Planning. The Family Planning program is now integrated

into MHC, and the Department will transition all participants to be covered under the SPA that is currently pending with CMS.

Table 68 shows that Family Planning program enrollment decreased from CY 2014 to CY 2017, with a slight increase in CY 2018. The decline in enrollment may be attributed to the ACA expansion in CY 2014, which increased the number of women who were eligible for full Medicaid benefits, thereby decreasing the population who needed family planning-only services.

Table 68. Number and Percentage of Family Planning Participants (Any Period of Enrollment) Who Received a Corresponding Service, CY 2014–CY 2018

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Number of Participants	22,042	19,754	15,447	13,154	13,680
Number with at Least 1 Service	6,305	4,671	2,925	2,271	1,901
Percentage with at Least 1 Service	28.6%	23.6%	18.9%	17.3%	13.9%

The percentage of women enrolled in the program for 12 months with at least one service decreased from 34.2 percent in CY 2014 to 11.0 percent in CY 2018 (Table 69). While the number of women with 12-month enrollment in the program initially increased in CY 2015, it gradually decreased, and by CY 2018 fell below the rate in CY 2014. The increase in CY 2015 may be attributed to the expansion of the previous post-partum Family Planning Program. Women who lose Medicaid coverage after their postpartum period will be automatically enrolled in the Family Planning Program and would renew coverage annually, replacing the limit that provided this coverage for only up to five years. Women may be unaware that they are enrolled in the program because no action was required on their part. Consequently, they do not seek services or know they are eligible to receive them.

Table 69. Number and Percentage of Family Planning Participants (12-Month Enrollment) Who Received a Corresponding Service, CY 2014–CY 2018

	CY 2014	CY 2015	CY 2016	CY 2017	CY 2018
Number of Participants	6,032	7,488	6,758	6,314	5,965
Number with at Least 1 Service	2,061	1,672	1,198	862	654
Percentage with at Least 1 Service	34.2%	22.3%	17.7%	13.7%	11.0%

Section VII Conclusion

Resources generated through managed care efficiencies allowed the Department to establish innovative programs to improve the health status of the HealthChoice population. The year 2017 saw the beginning of three initiatives. Residential Treatment for Individuals with SUD was made possible through a §1115 waiver of Medicaid's limitations for coverage of care in IMDs and is intended to improve outcomes for those with SUD. The HVS Pilot program is serving high-risk pregnant women and children up to age two, and the ACIS Pilot program is serving individuals with complex health care needs who are at risk of institutionalization and/or homelessness. Dental services for former foster care participants allowed former foster care individuals to receive dental coverage up to age 26.

The Department monitors several ongoing programs, including the ICS program for disabled adults, whose enrollment grew to 34 participants in 2018. In the long-running Family Planning Program, HealthChoice allows women with income up to 200 percent of the FPL to receive family planning services. The Family Planning Program's integration with MHC is now complete; as of 2018, more than 13,500 women (with any period of enrollment) were enrolled in the program, and 13.9 percent received a family planning service.

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Appendix. Definitions and Specifications

Table A1. Coverage Category Inclusion Criteria

Coverage Category	Inclusion Criteria		
Disabled	Coverage Group = A04, H01, H98, H99, L01, L98, L99, S01, S02, S03, S04, S05, S06, S07, S08, S10, S13, S14, S16, S98, S99, T01, T02, T03, T04, T05, T99		
MCHP	Coverage Group = D02, D04, P13, P14		
	OR		
	Coverage Group = F05, P06, P07	AND	Coverage Type = "S"
ACA Expansion	Coverage Group = A01, A02, A03		
Families & Children	All other Coverage Groups/Coverage Types		

Table A2. Medicaid Coverage Group Descriptions

Coverage Group	Description
A01	Childless Adults < 65, 138% FPL, former PAC
A02	Childless Adults < 65, 138% FPL, inc disabled
A03	Parents and Caretaker Relative 124%-138% FPL
A04	Disabled Adults, no Medicare 77% FPL
C13	Presumptive Eligibility
D01	Employer Sponsored Insurance (ESI),200%-250% FPL
D02	MCHP Premium, 212%-264% FPL
D03	Employer Sponsored Insurance (ESI),250%-300% FPL
D04	MCHP Premium, 265%-322% FPL
E01	IV-E Adoption & Foster Care
E02	FAC Foster Care
E03	State-Funded Foster Care
E04	State-Funded Subsidized Adoption
E05	Former Foster Care up to 26 years old
F01	TCA Recipients
F02	Post-TCA: Earnings Extension
F03	Post-TCA: Support Extension
F04	FAC Non-MA Requirement
F05	Parents/Primary Caretakers and Children <123% FPL
F98	Children 19 and 20 123% FPL
F99	FAC - Med Needy Spenddown
G01	Refugee Cash Assistance
G02	Post RCA: Earnings Extension
G98	Refugee Med Needy Non-Spenddown
G99	Refugee Med Needy Spenddown

Coverage Group	Description
H01	HCB Waiver
H98	HCB Waiver Med Needy
H99	HCB Waiver Spenddown
L01	SSI Recipient in LTC
L98	ABD Long Term Care
L99	ABD Long Term Care Spenddown
P01	GPA to Pregnant Women (ended 7/97)
P02	Pregnant Women up to 189% FPL
P03	Newborns
P04	Med Needy Newborns (ended 6/30/98)
P05	Newborns of PWC Moms (ended 6/30/98)
P06	Newborns of Elig Mothers and their < 1
P07	Children 1-19 , 1-6 143% FPL, 6-19 138% FPL
P08	Child Under 19, up to 100% FPL
P09	Maryland Kids Count (ended 6/30/98)
P10	Family Planning Program (FPP)
P11	Pregnant Women 190% - 264% of FPL
P12	Newborns of P11 Mothers
P13	Child Under 19, up to 189% FPL
P14	Title XXI MCHP. under 19, 190-211% FPL
S01	Public Assistance to Adults (PAA)
S02	SSI Recipients
S03	Qualified Medicare Beneficiary (QMB)
S04	Pickle Amendment
S05	Section 5103
S06	Qualified Disabled Working Individuals
S07	SLMB group I
S08	SLMB/MPAP
S10	QMB and MPAP
S11	TEMHA/MPAP
S12	Family Planning Program/MPAP
S13	ACE or EID
S14	SLMB group II
S15	SLMB group III
S16	Increased Community Services Program (ICS) formerly MPDP
S17	MPDP/SLMB I
S18	MPDP/SLMB II
S98	ABD - Med Needy
S99	ABD – Spenddown
T01	TCA Adult or Child In LTC

Coverage Group	Description
T02	Family LTC Med Needy
T03	Medicaid Child Under 1 in LTC
T04	Medicaid Child Under 6 in LTC
T05	Medicaid Child Under 19 in LTC
T99	Family LTC Med Needy Spenddown
W01	Women's Breast & CC
X01	State-Funded Aliens
X02	MAGI and Non-MAGI Undocumented or Ineligible Aliens, Emergency Services only
X03	MAGI Undocumented or Ineligible Aliens (dropped 2/15/17)

Table A3. Medicaid Coverage Type Descriptions

Coverage Type	Description
A	Aged
B	Blind
C	Complimentary Coverage
D	Disabled
E	FC and SA
F	Family
G	Refugee
H	HCB Waiver
M	Medicaid Only
N	Not in CARES
P	Pregnant
R	Regular
T	Family LTC
U	Unemployed
X	Miscellaneous

The Hilltop Institute

UMBC

Sondheim Hall, 3rd Floor
1000 Hilltop Circle
Baltimore, MD 21250
410-455-6854
www.hilltopinstitute.org