The Hilltop Institute

analysis to advance the health of vulnerable populations

Evaluation of the HealthChoice Program
CY 2009 to CY 2013

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UMBC

AN HONORS UNIVERSITY IN MARYLAND

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Executive Summary

HealthChoice—Maryland's statewide mandatory Medicaid managed care program—was implemented in 1997 under authority of Section 1115 of the Social Security Act. As of the end of calendar year (CY) 2013, more than 82 percent of the state's Medicaid population was enrolled in the HealthChoice Program. Children are also enrolled in the Maryland Children's Health Program (MCHP), Maryland's Children's Health Insurance Program (CHIP). Between CY 2009 and CY 2013, HealthChoice participants chose one of seven managed care organizations (MCOs) and a primary care provider (PCP) from their MCOs' network to oversee their medical care. Currently, eight MCOs participate in HealthChoice. HealthChoice enrollees receive the same comprehensive benefits as those available to Maryland Medicaid enrollees through the fee-for-service system. Since the inception of HealthChoice, the Maryland Department of Health and Mental Hygiene (DHMH) has conducted five comprehensive evaluations of the program as part of the 1115 waiver renewals. Between waiver renewals, DHMH completes an annual evaluation for HealthChoice stakeholders. This report is the 2013 annual evaluation of the HealthChoice program. Key findings from this evaluation are presented below.

Coverage and Access

Two of the goals of the HealthChoice program are to expand coverage to additional residents with low-income through resources generated from managed care efficiencies and to improve access to health care services for the Medicaid population. Related to these goals:

- Maryland extended full Medicaid eligibility to parents and caretaker relatives of children enrolled in Medicaid or the Maryland Children's Health Program (MCHP) with household incomes below 116 percent of the federal poverty level in July 2008. Enrollment in this parent expansion program increased from 49,376 enrollees in July 2009 to 108,388 enrollees in December 2013.
- Overall HealthChoice enrollment increased by 31 percent, from 634,638 enrollees in CY 2009 to 830,288 enrollees in CY 2013. These totals reflect individuals who were enrolled as of December 31 of each respective year, thus providing a snapshot of typical program enrollment on a given day.
- With these expansion activities and increased enrollment, it is important to maintain access to care and ensure program capacity to provide services to a growing population. Looking at service utilization as a measure of access, the percentage of enrollees who received an ambulatory care visit increased between CY 2009 and CY 2013, with 78 percent receiving a visit in CY 2013. Emergency department (ED) visits only decreased by 0.5 percentage point during this time period, suggesting that there is still room for

improvement in accessing care. The rates of HealthChoice participants with at least one inpatient admission increased by 4 percentage points during the evaluation period.

- Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results indicate that most participants report that they usually or always receive needed care and receive care quickly, and rates generally align with national benchmarks (WBA Research, 2013; WBA Research, 2011).

Throughout the evaluation period, the Centers for Medicare & Medicaid Services (CMS) has awarded Maryland performance bonuses for its work to identify and enroll eligible children in Medicaid and MCHP. These bonuses were given under the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), which provided performance bonuses to states that met two sets of criteria: 1) states must implement at least five of eight Medicaid and CHIP program features known to improve health coverage programs for children, and 2) states must increase Medicaid enrollment among children above a baseline level for the fiscal year (FY). The performance bonuses were distributed annually for FY 2009 through FY 2013.

CMS awarded Maryland $11 million for FY 2010 performance, $28 million for FY 2011 performance, $37 million for FY 2012 performance, and $43 million for FY 2013 performance (InsureKidsNow.gov, n.d). Specifically for 2012, CMS recognized Maryland's efforts to eliminate the requirement that applicants apply in-person; streamline the initial application form so that it is as simple as the renewal form; and allow proof of eligibility for other low-income programs to be deemed sufficient to qualify for Medicaid, known as "express lane eligibility" under CHIPRA.

Medical Home

Another goal of the HealthChoice program is to provide patient-focused, comprehensive, and coordinated care by providing each member with a medical home. One method of assessing the extent to which HealthChoice provides enrollees with a medical home is to measure the appropriateness of care coordination, i.e., whether enrollees can identify with and effectively navigate a medical home. With a greater understanding of the resources available to them, enrollees should be able to seek care in an ambulatory care setting before resorting to using the ED or letting an ailment exacerbate to the extent that it could warrant an inpatient admission. Related to this goal:

- The rates of potentially avoidable ED visits declined between CY 2009 and CY 2013.
- The percentage of participants with at least one inpatient admission with a Prevention Quality Indicator (PQI) designation increased from 8.7 percent in CY 2009 to 14.3 percent in CY 2013.

Under Maryland's new all-payer payment system waiver from the CMS, there are programs for monitoring PQI admissions across Medicaid, Medicare, and commercial payers, along with

global budget limits for hospitals that reduce hospitals' incentives to increase admissions. DHMH will use these tools to continue to monitor the rate of PQI admissions and will research policies to reduce the frequency of these admissions.

Quality of Care

Another goal of the HealthChoice program is to improve the quality of health services delivered. DHMH employs an extensive system of quality measurement and improvement that uses nationally recognized performance standards. Related to this goal:

- Breast and cervical cancer screening rates improved during the evaluation period, contributing to better preventive care for adults.
- Related to preventive care for children, HealthChoice rates for well-child and well-care visits and rates for immunizations increased during the evaluation period and were consistently higher than Medicaid national averages. Blood lead screening rates for children aged 12 to 23 months and 24 to 35 months also improved.
- Between CY 2009 and CY 2013, provider compliance increased for two of the five Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) components. These components are health and developmental history and health education/anticipatory guidance (Delmarva Foundation, 2015; Delmarva Foundation, 2014; Delmarva Foundation, 2011).
- Regarding the quality of care for chronic conditions, the percentage of enrollees who received appropriate asthma medications decreased during the evaluation period. For enrollees with diabetes, rates of eye exams, hemoglobin A1c (HbA1c) screenings, and low-density lipoprotein cholesterol (LDL-C) screening rates increased between CY 2009 and CY 2013.

Special Topics

As part of the goal of improving the quality of health services delivered, DHMH monitors the utilization of health services among vulnerable populations. Related to this goal:

- The dental service utilization rate among children aged 4 to 20 years increased by 7.4 percentage points between CY 2009 and CY 2013.
- In CY 2013, children in foster care had a lower rate of ambulatory care service utilization and a slightly higher rate of MCO outpatient ED visits compared with other children in HealthChoice.
- Measures of access to prenatal care services declined during the evaluation period. For example, timeliness of prenatal care decreased by 6 percentage points, from 87.5 percent

in CY 2009 to 81.5 percent in CY 2013. These declines may be attributed to the inclusion of a new HealthChoice MCO into the average rate calculations.

- Ambulatory care service utilization and CD4 testing improved for participants with HIV/AIDS during the evaluation period, while the viral load testing rate dropped. ED utilization also increased among this population.
- Regarding racial/ethnic disparities in access to care, Black children have lower rates of ambulatory care visits than other children. Among the entire HealthChoice population, Black participants also have the highest ED utilization rates.

Primary Adult Care Program

The HealthChoice Evaluation includes a section that addresses enrollment, access, and quality of care in the Primary Adult Care (PAC) program. The PAC program offered limited benefits to childless adults aged 19 years and older who were not eligible for Medicare or Medicaid and whose incomes were at or below 116 percent of the federal poverty level (FPL). As a result of the Medicaid expansion option in the Affordable Care Act (ACA), the PAC program transitioned into a categorically-eligible Medicaid population on January 1, 2014 (after this report's evaluation period). Childless adults under the age of 65 years and with incomes up to 138 percent of the FPL now receive full Medicaid benefits, and services are provided through HealthChoice MCOs.

Related to the PAC program:

- The number of individuals with any period of enrollment in PAC increased by 129 percent during the evaluation period, from 48,636 participants in CY 2009 to 111,519 participants in CY 2013. During the last half of CY 2013, the DHMH worked with the Maryland Health Citizens' Initiative to develop a media and grassroots campaign to enroll people into the PAC program. In CY 2013, at least 78 percent of PAC participants resided in three regions: Baltimore City, Baltimore Suburban, and Washington Suburban.
- Between CY 2009 and CY 2013, the percentage of PAC participants with a substance use disorder who received at least one methadone replacement therapy increased from 4.8 percent to 33.2 percent.
- DHMH began using PAC Healthcare Effectiveness Data and Information Set (HEDIS) measures in CY 2008. PAC performance on these measures improved during the evaluation period, except for cervical cancer screenings and eye exams for those with diabetes.

Evaluation of the HealthChoice Program
CY 2009 to CY 2013

Introduction

HealthChoice—Maryland's statewide mandatory Medicaid managed care program—was implemented in 1997 under authority of Section 1115 of the Social Security Act. In January 2002, the Maryland Department of Health and Mental Hygiene (DHMH) completed the first comprehensive evaluation of HealthChoice as part of the first 1115 waiver renewal. The 2002 evaluation examined HealthChoice performance by comparing service use during the program's initial years with utilization during the final year without managed care (fiscal year [FY] 1997). The Centers for Medicare & Medicaid Services (CMS) approved subsequent waiver renewals in 2005, 2007, 2010, and 2013.

The 2013 renewal evaluation focused on the HealthChoice goals of expanding coverage to additional Maryland residents with low income, improving access to care, and improving service quality. Between waiver renewals, DHMH continually monitors HealthChoice performance on a variety of measures and completes an annual evaluation for HealthChoice stakeholders.

This report is the 2013 annual evaluation of the HealthChoice program. The report begins with a brief overview of the HealthChoice program and recent program updates, and then addresses the following topics:

- Coverage and access to care
- The extent to which HealthChoice provides participants with a medical home
- The quality of care delivered to participants
- Special topics, including dental services, mental health care, substance use disorder (SUD) services, services provided to children in foster care, reproductive health services, services for individuals with HIV/AIDS, the Rare and Expensive Case Management (REM) program, and racial and ethnic disparities in utilization
- Access and quality of care under the Primary Adult Care (PAC) program

This report was completed collaboratively by DHMH and The Hilltop Institute at the University of Maryland, Baltimore County (UMBC).

Overview of the HealthChoice Program

As of the end of calendar year (CY) 2013, more than 82 percent of the State's Medicaid and Maryland Children's Health Program (MCHP) populations were enrolled in the HealthChoice Program. Participants in HealthChoice currently can choose one of eight managed care organizations (MCOs) and a primary care provider (PCP) from their MCOs' network to oversee

their medical care. The groups of Medicaid-eligible individuals who enroll in HealthChoice MCOs include:

- 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
- Women with low income who are pregnant or less than 60 days postpartum
- Individuals receiving Supplemental Security Income (SSI) who are younger than 65 years and not eligible for Medicare

Not all Maryland Medicaid beneficiaries are enrolled in HealthChoice MCOs. Groups that are not eligible for MCO enrollment include:

- Medicare beneficiaries
- Individuals aged 65 years and older
- Individuals in a "spend-down" eligibility group who are only eligible for Medicaid for a limited period of time
- Individuals who are continuously enrolled in a long-term care facility for more than 30 days
- Individuals who are continuously enrolled in an institution for mental illness for more than 30 days
- Individuals who reside in an intermediate care facility for intellectual disabilities
- Individuals enrolled in the Model Waiver or the Employed Individuals with Disabilities program
- Refugees and certain categories of undocumented immigrants

Additional populations covered under the HealthChoice waiver include individuals in the Family Planning, REM, and PAC programs. HealthChoice-eligible individuals with certain diagnoses may choose to receive care on a fee-for-service (FFS) basis through the REM program. Family Planning and PAC are both limited benefit packages under the waiver. REM and Family Planning are further discussed in Section IV of this report, and the PAC Program is addressed in Section V.

HealthChoice participants receive the same comprehensive benefits as those available to Maryland Medicaid participants through the FFS system. Services in the MCO benefit package include, but are not limited to:

- 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
- Prescription drugs, with the exception of mental health and HIV/AIDS drugs, which are provided under the FFS system
- Substance abuse treatment services[1]
- Durable medical equipment and disposable medical supplies
- Home health care
- Vision services
- Dialysis
- The first 30 days of care long-term care services.

Some services are carved out of the MCO benefit package and instead are covered by the Medicaid FFS system. These include:

- Specialty mental health care, which is administered by the DHMH Behavioral Health Administration
- 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, speech, and audiology) for children
- Personal care services
- Long-term care services after the first 30 days of care (individuals who require more than 30 days of long-term care services are disenrolled from HealthChoice)
- Viral load testing services, genotypic, phenotypic, or other HIV/AIDS drug resistance testing for the treatment of HIV/AIDS
- HIV/AIDS drugs and specialty mental health drugs

[1] Substance abuse treatment services were carved out of the MCO benefit package on January 1, 2015 (outside of this evaluation period).

- Services covered under 1915(c) home and community-based services waivers

Recent Program Updates

Several significant changes were made to the HealthChoice program during this evaluation period. These include:

- In response to directives from CMS, several changes were made to the Family Planning Program in 2008. CMS required the program to perform annual active redeterminations and reduce the upper income limit from 250 percent to 200 percent of the federal poverty level (FPL). Further, the program no longer enrolls women with other third party insurance that includes family planning benefits. Beginning in January 2012, Maryland expanded eligibility for the Family Planning Program to include all women with household income up to 200 percent of the FPL. It previously only covered women losing pregnancy-related Medicaid eligibility 60 days post partum.
- In 2011, Maryland began a three-year pilot program to test the use of a patient-centered medical home (PCMH), called the Maryland Multi-Payer Patient-Centered Medical Home Program (MMPP). The MMPP provides Maryland patients with many services, such as integrated care plans, chronic disease management, medication reconciliation at every visit, and same-day appointments for urgent matters. Across the State, 52 primary and multispecialty practices and FQHCs participate in MMPP. These practices are paid through HealthChoice MCOs and private insurance carriers.
- CMS awarded Maryland performance bonuses for its work to identify and enroll eligible children in Medicaid and MCHP. These bonuses were given under the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), which provided performance bonuses to states that met two sets of criteria: 1) States must implement at least five of eight Medicaid and CHIP program features known to improve health coverage programs for children, and 2) States must increase Medicaid enrollment among children above a baseline level for the FY. The performance bonuses were distributed annually in FY 2009 through FY 2013.

  CMS awarded Maryland $11 million for FY 2010 performance, $28 million for FY 2011 performance, $37 million for FY 2012 performance, and $43 million for FY 2013 performance (InsureKidsNow.gov, n.d). Specifically for 2012, CMS recognized Maryland's efforts to eliminate the requirement that applicants apply in-person; streamline the initial application form so that it is as simple as the renewal form; and allow proof of eligibility for other low-income programs to be deemed sufficient to qualify for Medicaid, known as "express lane eligibility" under CHIPRA.
- In FY 2013, the Maryland General Assembly set aside funds for the development of a chronic health home demonstration. Section 2703 of the Affordable Care Act (ACA) allows states to amend their Medicaid state plans to offer health homes that provide comprehensive systems of care coordination for participants with two or more defined

chronic conditions. Maryland's chronic health home program serves individuals 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 June 2015, DHMH approved 75 Health Home site applications. The Health Home sites include 60 psychiatric rehabilitation programs, 10 mobile treatment providers, and 5 opioid treatment programs.

- Under the ACA, Maryland added several new Medicaid coverage groups:
    - Maryland expanded its Medicaid program to offer coverage to individuals with incomes up to 138 percent of the FPL on January 1, 2014. Individuals enrolled in the PAC program were automatically transferred into this expansion coverage. As of February 2015, over 250,000 adults gained Medicaid coverage through this expansion. This included 83,129 former PAC enrollees[2].
- There were several changes to the number of MCOs participating in HealthChoice. One MCO, Coventry, withdrew from the program in February 2013, and two new MCOs, Riverside Health of Maryland and Kaiser Permanente of the Mid-Atlantic States, joined the program in February 2013 and June 2014, respectively.

[2] PAC enrollment reported in MMIS2 as of December 2013.

Section I. Coverage and Access

Two of the goals of the HealthChoice program are to expand coverage to additional residents with low income through resources generated from managed care efficiencies and to improve access to health care services for the Medicaid/MCHP population. This section of the report addresses Maryland's progress toward achieving these coverage and access goals. Coverage is examined through several enrollment measures. Access to care is measured by provider network adequacy, ambulatory care service utilization, emergency department (ED) service utilization, inpatient care utilization, and enrollee satisfaction survey results.

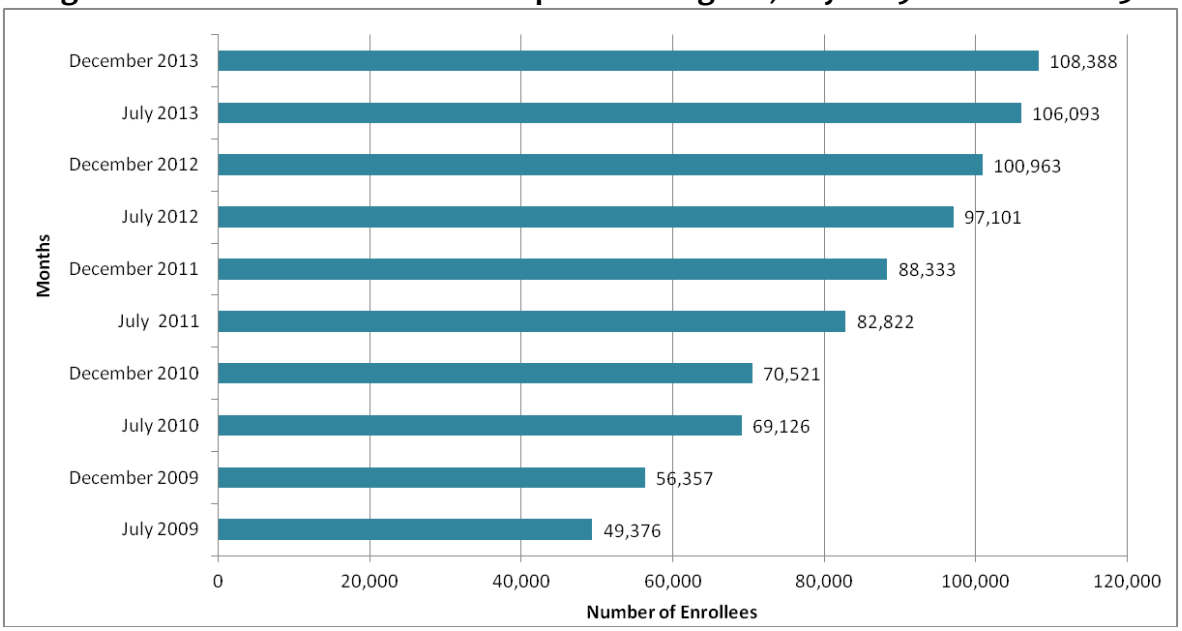
Are More Marylanders Covered?

Major Expansion Initiatives

Maryland recently engaged in several efforts to increase Medicaid enrollment. Legislation and grant awards increased DHMH's capacity to enroll uninsured children and adults in programs for which they might be eligible. The most successful of these expansion efforts through 2013 was the increase in income eligibility for families in Medicaid. Effective July 1, 2008, Maryland expanded the eligibility thresholds for parents and caretaker relatives of children enrolled in Medicaid or MCHP from approximately 40 percent of the FPL to 116 percent of the FPL. Starting in January 2014, under the ACA, Maryland expanded its Medicaid program to individuals with incomes up to 138 percent of the FPL.

The 2008 eligibility expansion for families occurred at the same time that the economy slipped into recession, resulting in a dramatic increase in enrollment. Figure 1 presents the monthly enrollment in this parent expansion program. Enrollment increased from 49,376 participants in July 2009 to 108,388 participants in December 2013.

Figure 1. Enrollment in the Parent Expansion Program, July 2009–December 2013



HealthChoice Enrollment

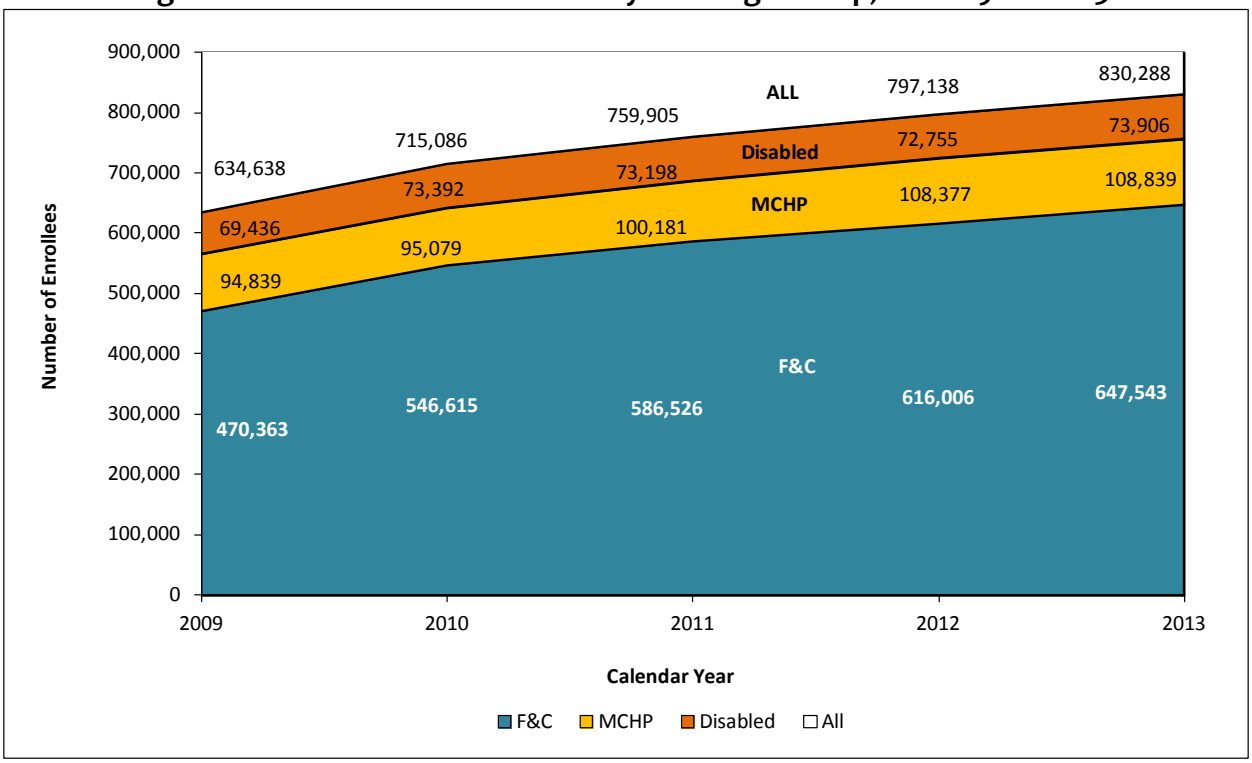
HealthChoice enrollment can be measured by several methods. One methodology is to count the number of individuals with any period of enrollment during a given CY, including individuals who were only briefly enrolled. Another method is to count individuals who were enrolled at a certain point in time. Although this yields a smaller number, it provides a snapshot of typical program enrollment on a given day. Unless specified otherwise, 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.[3]

The overall HealthChoice population grew by 31 percent between CY 2009 and CY 2013 (Figure 2). Most of the enrollment increase was due to the family expansion and occurred in CY 2010, when HealthChoice grew by 13 percent (80,448 enrollees). Figure 2 displays HealthChoice enrollment by coverage group between CY 2009 and CY 2013. As of December 31 of each year, most HealthChoice enrollees were eligible in families, children, and pregnant women (F&C) categories. Overall, F&C enrollment grew by 38 percent between CY 2009 and CY 2013. MCHP enrollment increased by 15 percent in the evaluation period. The coverage

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

group for individuals with disabilities was the smallest eligibility category in each year under review[4], but it grew by 6 percent between CY 2009 and CY 2013.

Figure 2. HealthChoice Enrollment by Coverage Group, CY 2009–CY 2013



Enrollment Growth

National enrollment in Medicaid reached 55 million by June 2013 (Kaiser Commission on Medicaid and the Uninsured, 2014). According to the Kaiser Commission on Medicaid and the Uninsured, between June 2012 and June 2013, Maryland experienced the fourth highest growth rate in Medicaid enrollment out of all 50 states and the District of Columbia (2014). Most new Maryland Medicaid participants enroll into managed care.

Table 1 shows the percentage of Maryland's population enrolled in HealthChoice between CY 2009 and CY 2013. These data are presented for individuals enrolled in HealthChoice as of December 31 and individuals with any period of HealthChoice enrollment. The percentage with any period of HealthChoice enrollment gradually increased from 13.0 percent in CY 2009 to 16.2 percent in CY 2013.

[4] Individuals who are covered under both Medicare and Medicaid programs are not enrolled in HealthChoice.

Table 1. HealthChoice Enrollment as a Percentage of the Maryland Population, CY 2009–CY 2013

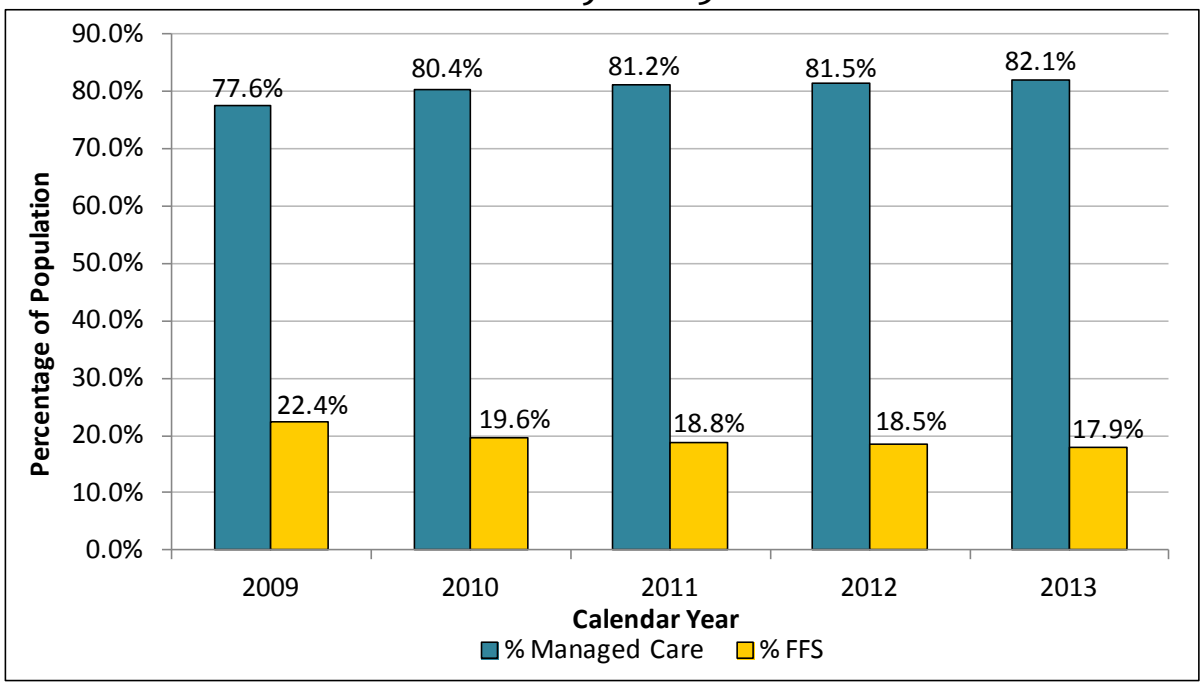
	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Maryland Population*	5,699,478	5,787,193	5,840,241	5,884,868	5,928,814
Individuals Enrolled in HealthChoice for Any Period of Time During Year					
HealthChoice Population	743,098	832,498	893,084	930,647	961,597
% of Population in HealthChoice	13.0%	14.4%	15.3%	15.8%	16.2%
Individuals Enrolled in HealthChoice as of December 31					
HealthChoice Population	634,638	715,086	759,905	797,138	830,288
% of Population in HealthChoice	11.1%	12.4%	13.0%	13.5%	14.0%

*Maryland Population Data Source: United States Census Bureau, 2014
http://www.census.gov/popest/data/state/totals/2013/index.html

Are More Maryland Medicaid/MCHP Participants Covered Under Managed Care?

One of the original goals of the HealthChoice program was to enroll more individuals in Medicaid and MCHP into managed care. Figure 3 presents the percentage of Maryland Medicaid/MCHP participants who were enrolled in managed care (including both HealthChoice and PAC MCOs) compared with FFS enrollment. Between CY 2009 and CY 2013, managed care enrollment increased from 77.6 percent to 82.1 percent.

Figure 3. Percentage of Medicaid/MCHP Participants in Managed Care versus FFS, CY 2009–CY 2013



Does the Covered Population Access Care?

With this increased enrollment, it is important to maintain access to care. This section of the report examines claims and encounter data related to ambulatory care, ED visits, and inpatient admissions. In addition, it analyzes network adequacy to evaluate access to care. The Consumer Assessment of Healthcare Providers and Systems (CAHPS) program, which is a part of the U.S. Agency for Healthcare Research and Quality (AHRQ), offers a CAHPS Health Plan Survey. This section also discusses results from that survey.

Ambulatory Care Visits

DHMH monitors ambulatory care utilization as a measure of access to care. An ambulatory care visit is defined as a contact with a doctor or nurse practitioner in a clinic, physician's office, or hospital outpatient department by an individual enrolled in HealthChoice at any time during the measurement year.[5] HealthChoice participants should be able to seek care in an ambulatory care setting before using the ED for a non-emergent condition or allowing a condition to exacerbate to the extent that it requires an inpatient admission. In this section of the report, ambulatory care visits are measured using MCO encounter and FFS claims data.

[5] This definition excludes ED visits, hospital inpatient services, substance abuse treatment, mental health, home health, x-ray, and laboratory services.

Figure 4 presents the percentage of HealthChoice participants who received an ambulatory care visit during the calendar year by age group. Overall, the ambulatory care visit rate increased from 77.8 percent in CY 2009 to 78.3 percent in CY 2013, and the rate increased for all age groups. The ambulatory care visit rate for the 15 to 18-year old age group increased by 2.9 percentage points during the evaluation period, which was the largest increase among the age groups.

Figure 4. Percentage of the HealthChoice Population Receiving an Ambulatory Care Visit by Age Group, CY 2009–CY 2013

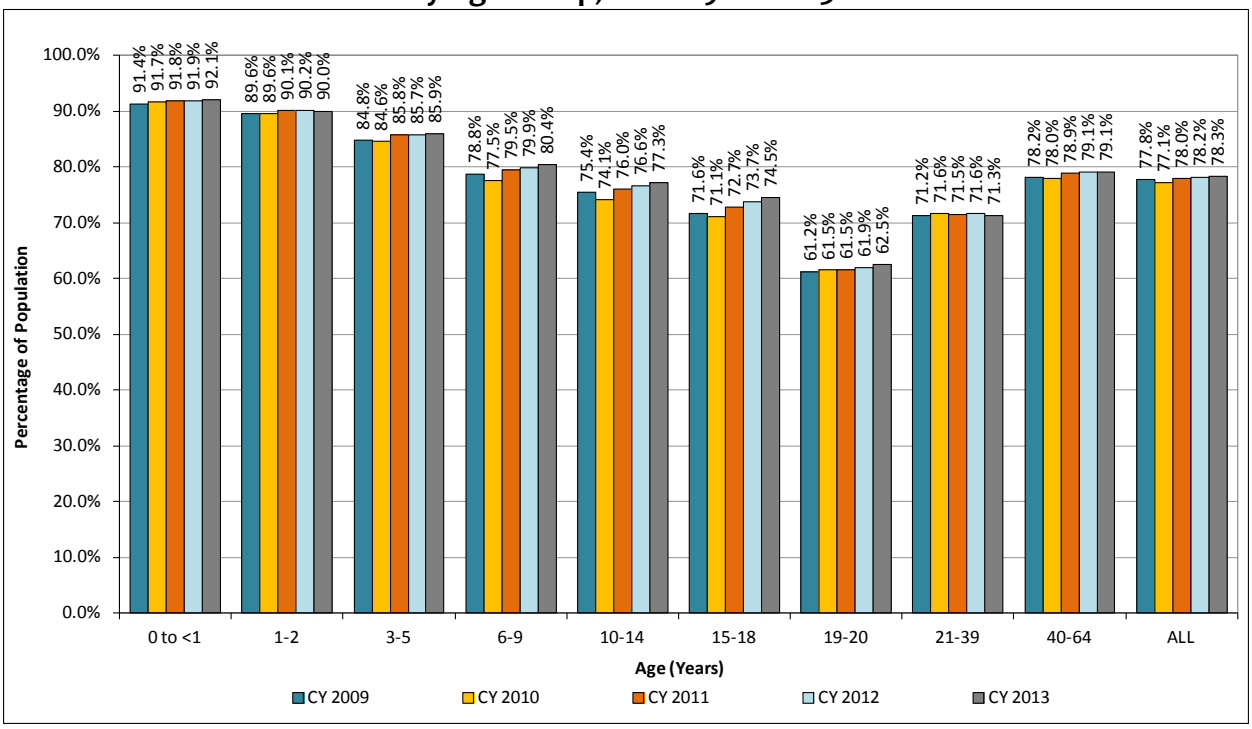
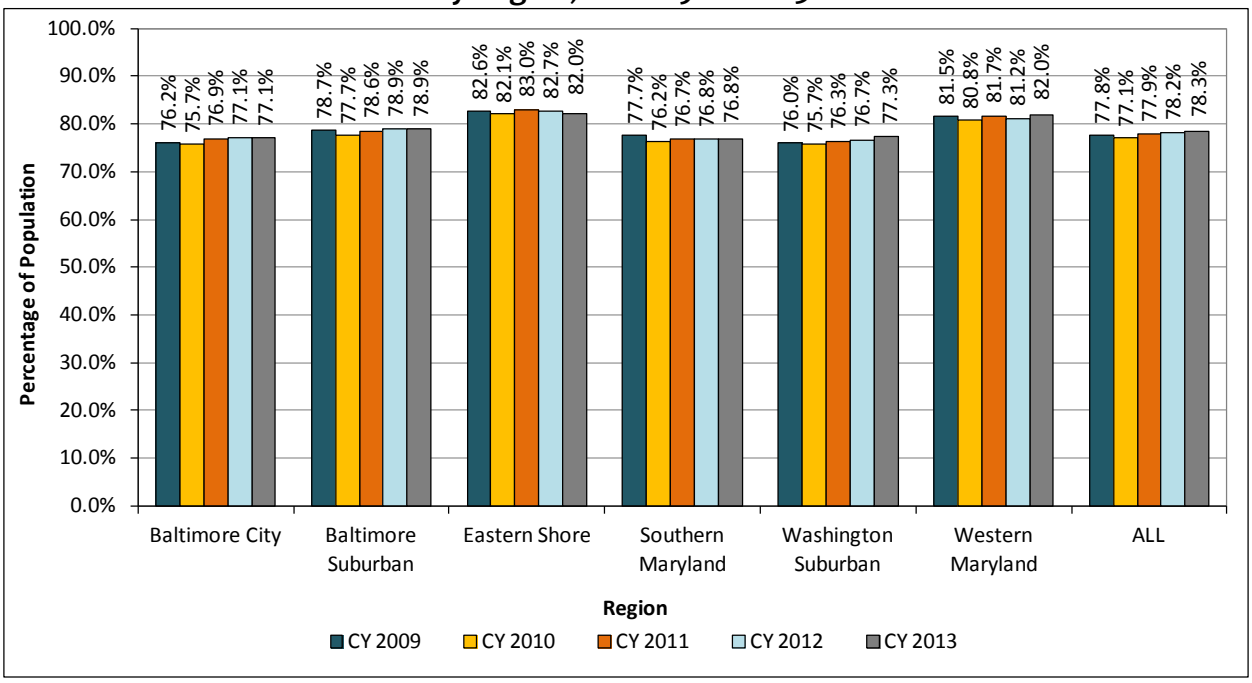


Figure 5 presents the percentage of the HealthChoice population receiving an ambulatory care visit by region between CY 2009 and CY 2013. Visit rates among the regions increased during the evaluation period, with the exception of the Eastern Shore and the Southern Maryland regions. However, the Eastern Shore and the Western Maryland regions tied for the highest percentage of enrollees receiving ambulatory care visits, at 82.0 percent, and the Southern Maryland region had the lowest rate, at 76.8 percent. These data demonstrate that HealthChoice recipients throughout the State had access to ambulatory care.

Figure 5. Percentage of the HealthChoice Population Receiving an Ambulatory Care Visit by Region, CY 2009–CY 2013



ED Utilization

The primary role of the ED is to treat seriously ill and injured patients. Ideally, ED visits should not occur for conditions that can be treated in an ambulatory care setting. HealthChoice was expected to lower ED use based on the premise that a managed care system is capable of promoting ambulatory and preventive care, thereby reducing the need for emergency services. To assess overall ED utilization, DHMH measures the percentage of individuals with any period of enrollment who visited an ED at least once during the calendar year. This measure excludes ED visits that resulted in an inpatient hospital admission.

Figure 6 presents ED use by coverage group. Overall, ED use among HealthChoice participants decreased by 0.5 percentage point between CY 2009 and CY 2013. Participants with disabilities were more likely to utilize ED services compared with other coverage groups throughout the evaluation period. Their ED use increased by 5.0 percentage points.

Figure 6. Percentage of the HealthChoice Population with at Least One ED Visit by Coverage Group, CY 2009–CY 2013

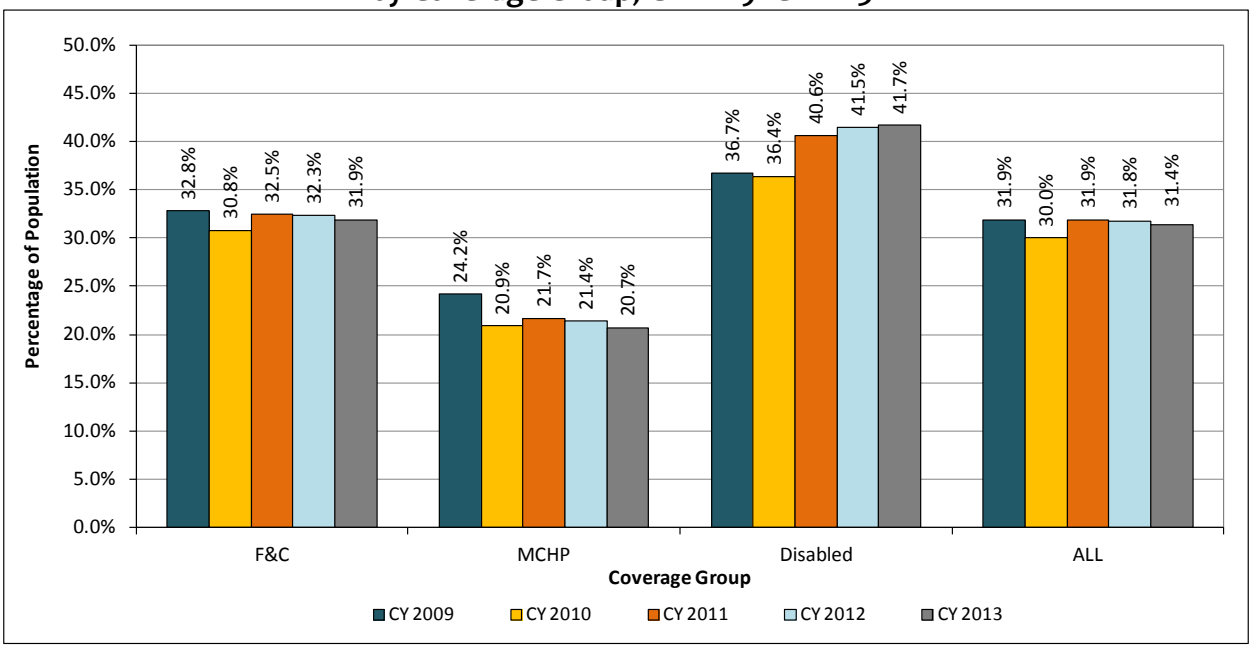
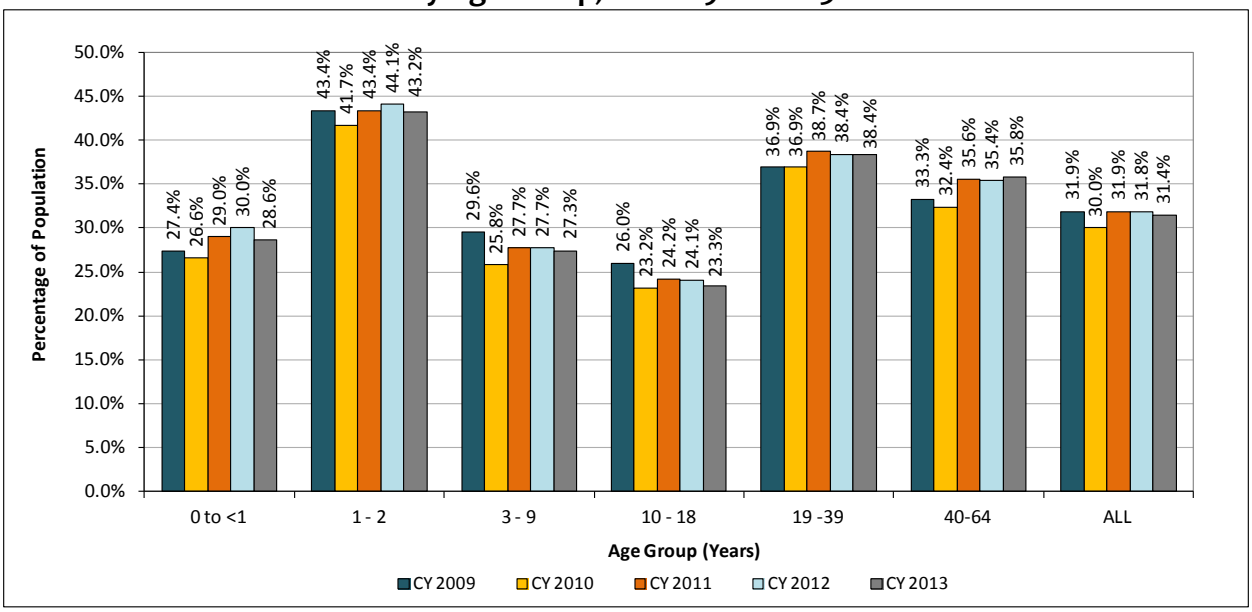


Figure 7 shows ED utilization by age group during CY 2009 through CY 2013. Children aged 1 and 2 years had the highest ED use across the evaluation period, followed by adults aged 19 to 39 years.

Figure 7. Percentage of the HealthChoice Population with at least One ED Visit by Age Group, CY 2009–CY 2013



Inpatient Admissions

To assess overall inpatient utilization, DHMH measures the percentage of participants with any period of HealthChoice enrollment who had an inpatient admission during the calendar year. Inpatient admissions include all institutional services reported by Maryland hospitals as inpatient. Table 2 presents the percentage of HealthChoice participants aged 18 to 64 years with at least one inpatient hospital admission. Overall, the rates of HealthChoice participants with at least one inpatient admission increased from 9.7 percent in CY 2009 to 13.7 percent in CY 2013.

Table 2. Inpatient Admissions by HealthChoice Participants Aged 18 – 64 Years (Any Period of Enrollment), CY 2009 – CY 2013

Year	Number of Participants	Number with At Least One Admission	Percent of Total
CY 2009	256,581	24,852	9.7%
CY 2010	311,658	31,007	9.9%
CY 2011	346,844	35,066	10.1%
CY 2012	364,523	40,365	11.1%
CY 2013	378,862	51,759	13.7%

Are Provider Networks Adequate to Ensure Access?

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 enrollee population. HealthChoice regulations[6] require a ratio of 1 PCP to every 200 participants within each of the 40 local access areas (LAAs) in the State. Because some PCPs traditionally serve a high volume of HealthChoice participants at some of their sites (e.g., FQHC physicians), the regulations permit DHMH to approve a ratio of 2,000 adult participants per high-volume provider and 1,500 participants aged 0 to 21 years per high-volume provider. DHMH assesses network adequacy periodically throughout the year to identify potential network inadequacies and works with the MCOs to resolve capacity issues. Should any such issues arise, DHMH will discontinue new enrollment for that MCO in the affected region until it increases provider contracts to an adequate level.

Table 3 shows PCP network adequacy as of December 2013. The analysis counts the number of PCP offices in each LAA. If a provider has more than one office location in any LAA, only one office was counted. If a provider has multiple office locations among different LAAs, one office is counted in each LAA. Two capacity estimates are presented: 200 participants per PCP office and 500 participants per PCP office. Although regulatory requirements apply to a single MCO, this analysis aggregates data from all seven HealthChoice MCOs. The analysis does not allow a single provider office who contracts with multiple MCOs to be counted multiple times; thus, it applies a higher standard than that in regulation.

Based on a standard enrollee-to-PCP ratio of 500:1, provider networks in the LAAs are more than adequate. Four LAAs do not meet the stricter 200:1 ratio: Baltimore City Northeast, Prince George's Southwest, Caroline, and Dorchester. However, HealthChoice enrollees residing in Prince George's Southwest may receive care from PCPs located in Washington, D.C.

[6] COMAR 10.09.66.05.B.

Table 3. PCP Capacity by Local Access Area, for Any Period of Enrollment, CY 2013

	Total PCP Offices			Enrollment	Excess Capacity	
Local Access Area	CY 2013	Multiplied by 200	Multiplied by 500	CY 2013	Difference 200:1 Ratio	Difference 500:1 Ratio
Allegany	84	16,800	42,000	15,338	1,462	26,662
Anne Arundel N	504	100,800	252,000	37,240	63,560	214,760
Anne Arundel S	347	69,400	173,500	20,358	49,042	153,142
Baltimore City E	789	157,800	394,500	34,258	123,542	360,242
Baltimore City NC	186	37,200	93,000	15,045	22,155	77,955
Baltimore City NE	126	25,200	63,000	31,757	-6,557	31,243
Baltimore City NW	470	94,000	235,000	28,598	65,402	206,402
Baltimore City S	178	35,600	89,000	22,650	12,950	66,350
Baltimore City SE	398	79,600	199,000	30,965	48,635	168,035
Baltimore City W	687	137,400	343,500	46,166	91,234	297,334
Baltimore County E	361	72,200	180,500	32,591	39,609	147,909
Baltimore County N	685	137,000	342,500	19,292	117,708	323,208
Baltimore County NW	279	55,800	139,500	40,367	15,433	99,133
Baltimore County SW	325	65,000	162,500	28,656	36,344	133,844
Calvert	159	31,800	79,500	11,001	20,799	68,499
Caroline	32	6,400	16,000	8,793	-2,393	7,207
Carroll	243	48,600	121,500	16,747	31,853	104,753
Cecil	120	24,000	60,000	19,368	4,632	40,632
Charles	223	44,600	111,500	21,208	23,392	90,292
Dorchester	43	8,600	21,500	8,722	-122	12,778
Frederick	187	37,400	93,500	25,601	11,799	67,899
Garrett	32	6,400	16,000	5,741	659	10,259
Harford E	130	26,000	65,000	9,779	16,221	55,221
Harford W	238	47,600	119,000	19,784	27,816	99,216
Howard	356	71,200	178,000	26,894	44,306	151,106
Kent	25	5,000	12,500	3,738	1,262	8,762
Mont. - Silver Spring	436	87,200	218,000	58,812	28,388	159,188
Mont. Mid-County	442	88,400	221,000	18,509	69,891	202,491
Montgomery N	304	60,800	152,000	42,299	18,501	109,701
Prince George's NE	246	49,200	123,000	24,960	24,240	98,040
Prince George's NW	461	92,200	230,500	83,689	8,511	146,811
Prince George's SE	161	32,200	80,500	17,017	15,183	63,483
Prince George's SW	130	26,000	65,000	39,033	-13,033	25,967
Queen Anne's	71	14,200	35,500	6,348	7,852	29,152
Somerset	34	6,800	17,000	5,587	1,213	11,413
St. Mary's	131	26,200	65,500	15,797	10,403	49,703
Talbot	107	21,400	53,500	5,393	16,007	48,107
Washington	186	37,200	93,000	29,799	7,401	63,201
Wicomico	122	24,400	61,000	24,243	157	36,757
Worcester	77	15,400	38,500	8,641	6,759	29,859
Total (in MD)	**10,115**	**2,023,000**	**5,057,500**	**960,784**	**1,062,216**	**4,096,716**
Other	203					
Washington, DC	976					

Specialty Care Provider Network Adequacy

In addition to ensuring PCP network adequacy, DHMH 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, the MCO must arrange for care with an out-of-network specialist and compensate the provider. Regulations[7] for specialty care access require each MCO to have an in-network contract with at least one provider statewide in 14 major medical specialties, including allergy, dermatology, endocrinology, infectious disease, nephrology, and pulmonology. Additionally, for each of the 10 regions throughout the State in which an MCO serves, an MCO must include at least one in-network specialist in each of the eight core specialties: cardiology, otolaryngology (ENT), gastroenterology, neurology, ophthalmology, orthopedics, surgery, and urology.

DHMH regularly monitors compliance with these specialty care access standards. As of August 2013, all seven MCOs met specialty coverage requirements for the core and major medical specialties.

CAHPS Survey Results

The CAHPS survey is adopted by DHMH to measure enrollees' satisfaction with their medical care (WBA Research, 2014; WBA Research, 2013). Two CAHPS survey measures related to access to care include "getting needed care" and "getting care quickly".

"Getting needed care" measures:

- How often it was easy for participants to get care from specialists in the last six months
- How often it was easy for participants to get care, tests, or treatment through their health plans

"Getting care quickly" measures:

- How often the participants received care as soon as possible, when they needed care right away
- Not counting the times participants needed care right away, how often they received an appointment for health care at a doctor's office or clinic as soon as they thought they needed it

The possible survey responses for these two measures are "never", "sometimes", "usually" or "always". HealthChoice enrollees' responses are compared with benchmarks from Quality

[7] COMAR 10.09.66.05-1

Compass, a national database developed by the National Committee for Quality Assurance (NCQA). The Quality Compass benchmarks provide national ratings from other Medicaid managed care plans across the country.

In CY 2013, 80 percent of adult HealthChoice members responded that they were "usually" or "always" successful in getting needed care, and 79 percent of adult members responded that they were "usually" or "always" successful in getting care quickly (Table 4). The percentage of HealthChoice members getting needed care is equal to the CY 2013 NCQA Quality Compass benchmark, whereas it is two percentage points lower for members who responded for getting care quickly.

Table 4. Percentage of Adult HealthChoice Participants Responding "Usually" or "Always" to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Getting Needed Care - Percentage of participants who responded "Usually" or "Always"					
HealthChoice	74%	72%	71%	79%	80%
NCQA Quality Compass Benchmark	75%	76%	76%	81%	80%
Getting Care Quickly - Percentage of participants who responded "Usually" or "Always"					
HealthChoice	80%	80%	79%	80%	79%
NCQA Quality Compass Benchmark	79%	81%	80%	81%	81%

In CY 2013, 84 percent of parents and guardians of children enrolled in HealthChoice responded that they were "usually" or "always" successful in getting needed care for their children, and 90 percent responded "usually" or "always" to getting care quickly (Table 5). The getting needed care rate is one percentage point lower than the NCQA benchmark, whereas the getting care quickly rate is one percentage point higher.

Table 5. Percentage of Parents and Guardians of Child HealthChoice Participants Responding "Usually" or "Always" to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Getting Needed Care - Percentage of members who responded "Usually" or "Always"					
HealthChoice	74%	77%	79%	82%	84%
NCQA Quality Compass Benchmark	79%	79%	79%	84%	85%
Getting Care Quickly - Percentage of members who responded "Usually" or "Always"					
HealthChoice	88%	88%	87%	91%	90%
NCQA Quality Compass Benchmark	87%	87%	87%	89%	89%

Parents and guardians of children with chronic conditions in HealthChoice were also surveyed (Table 6). In CY 2013, 85 percent responded "usually" or "always" to getting needed care for

their children, which was two percentage points lower than the NCQA benchmark of 87 percent. Ninety-two percent reported "usually" or "always" to getting care quickly, one percentage point lower than the NCQA benchmark. National benchmarks for this population were available beginning in CY 2011.

Table 6. Percentage of Parents and Guardians of Children with Chronic Conditions in HealthChoice Responding "Usually" or "Always" to Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Getting Needed Care - Percentage of members who responded "Usually" or "Always"					
HealthChoice	75%	78%	80%	84%	85%
NCQA Quality Compass Benchmark*	N/A	N/A	81%	86%	87%
Getting Care Quickly - Percentage of members who responded "Usually" or "Always"					
HealthChoice	90%	91%	90%	93%	92%
NCQA Quality Compass Benchmark*	N/A	N/A	90%	92%	93%

*NCQA Quality Compass Benchmarks were available for children with chronic conditions beginning in CY 2011.

Section I Summary

Section I of this report described the HealthChoice program's progress in achieving its goals of expanding coverage and improving access to care. Related to coverage, Maryland expanded Medicaid eligibility for parents and caretaker relatives of children enrolled in Medicaid or MCHP in July 2008. By December 2013, 108,388 new parents and caretaker relatives were covered under HealthChoice through the parent expansion program. The overall HealthChoice population grew by 31 percent between CY 2009 and CY 2013. By CY 2013, 14 percent of the State population was enrolled in HealthChoice.

With expansion activities and increased enrollment, it is important to maintain access to care and ensure program capacity to serve a growing population. Regarding PCP networks, four areas in the State did not meet conservative network adequacy standards: one in Baltimore City, one in the Washington Suburban region, and two on the Eastern Shore. However, the specialist network standards were met across all MCOs and regions in the State. Looking at service utilization as a measure of access, the percentage of participants receiving an ambulatory care visit increased since CY 2009, with approximately 78.3 percent of participants receiving a visit in CY 2013. The inpatient admission rate increased during the evaluation period, and the ED visit rate decreased by only 0.5 percentage point, which suggests that there is still room for improvement in access to care. CAHPS survey results indicate that most participants report that they usually or always receive needed care and receive care quickly, and rates generally align with national benchmarks.

Section II. Medical Home

One of the goals of the HealthChoice program is to ensure patient-focused, comprehensive, and coordinated care by providing each member with a medical home. HealthChoice participants choose an MCO and a PCP from their MCOs' network to oversee their medical care and provide a medical home. This section of the report discusses the extent to which HealthChoice provides participants with a medical home by assessing appropriate service utilization.

Appropriate Service Utilization

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

Appropriateness of ED Care

A fundamental goal of managed care programs such as HealthChoice is the delivery of the right care at the right time in the right setting. One widely used methodology to evaluate this goal in the ED setting is based on classifications developed by researchers at the New York University Center for Health and Public Service Research (NYU) (Billings, Parikh, & Mijanovich, 2000). According to Billings et al., 2000, the ED use 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 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 categories 1 through 3 may indicate problems with access to primary care. Figure 8 presents the distribution of all ED visits by NYU classification for CY 2013 for individuals with any period of HealthChoice enrollment. In CY 2013, 51.9 percent of all ED visits were for potentially avoidable conditions; that is, the visit could have been avoided with timely and quality primary care. Participants in the F&C and MCHP coverage groups had higher rates of potentially avoidable visits than participants in the disabled coverage group.

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 accounted for 26.5 percent of all ED visits in CY 2013. Adults aged 40 through 64 years had more ED visits related to category 4 than other age groups. Children aged 3 through 18 years had more injury-related ED visits compared with other age groups. The inpatient category in Figure 8, which is not a part of the NYU classification, represents ED visits that resulted in a hospital admission. Participants with disabilities had a much higher rate of ED visits that led to an inpatient admission than participants in the F&C and MCHP coverage groups.

Figure 8. Classification of ED Visits by HealthChoice Participants, CY 2013

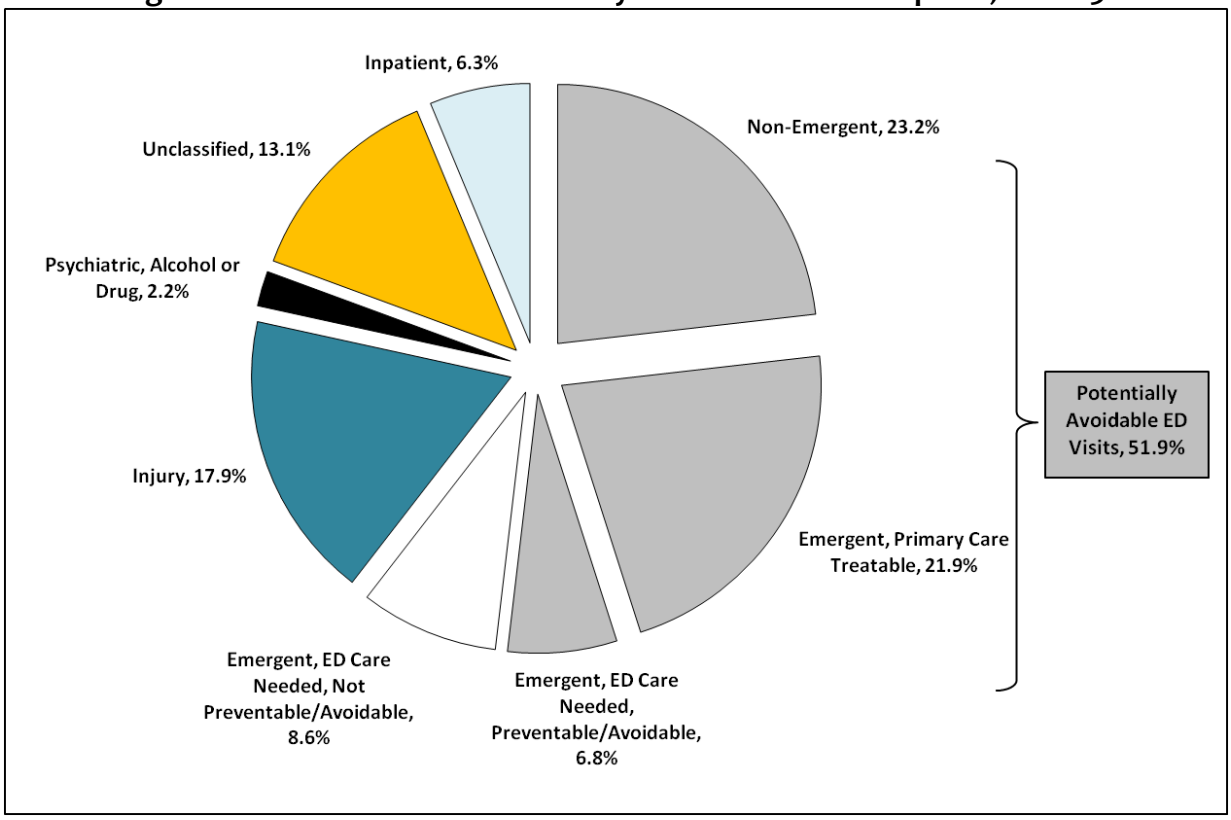
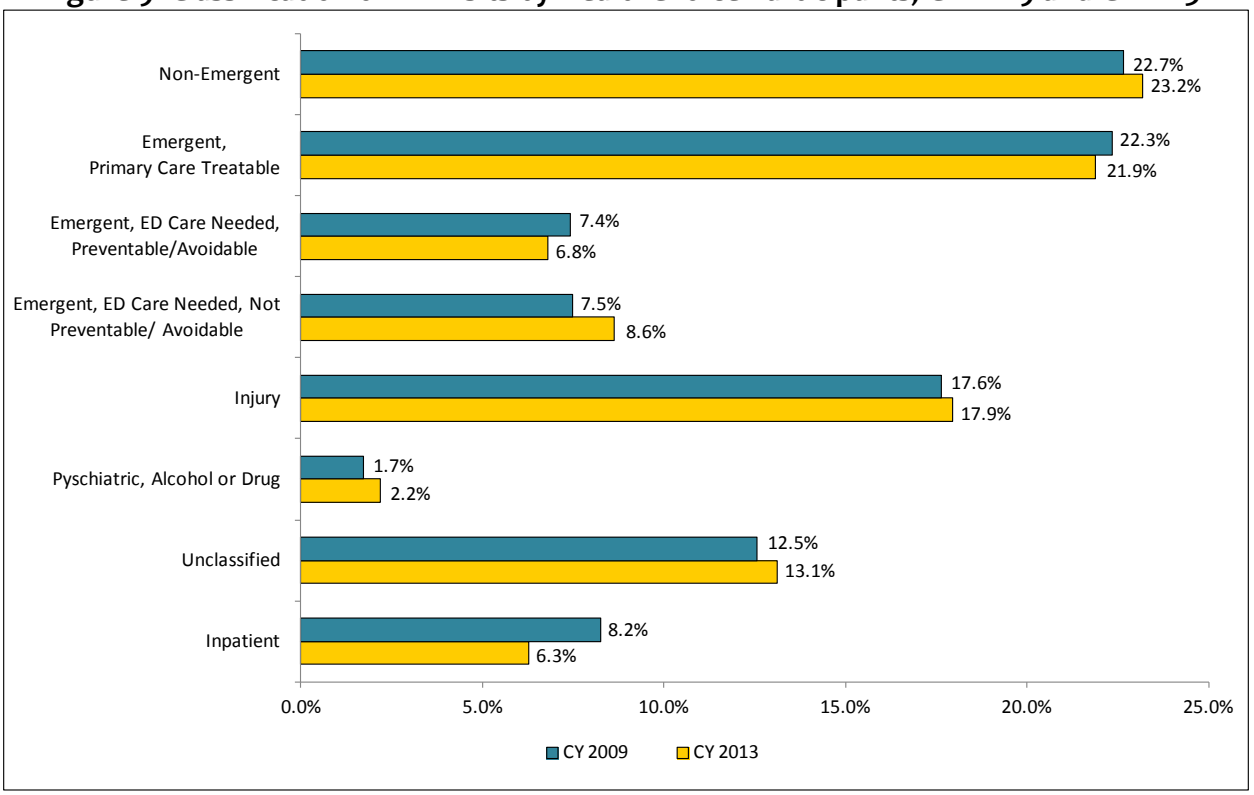


Figure 9 compares the ED visit classifications for CY 2009 with the classifications for CY 2013. The data show that potentially avoidable ED visits decreased during the evaluation period, from 52.4 percent of all ED visits to 51.9 percent.

Figure 9. Classification of ED Visits by HealthChoice Participants, CY 2009 and CY 2013



Preventable or Avoidable Admissions

Ambulatory care sensitive hospitalizations (ACSHs), also referred to as preventable or avoidable hospitalizations, are inpatient admissions that could have been prevented if proper ambulatory care had been provided in a timely and effective manner. High numbers of avoidable admissions may indicate problems with access to primary care services or deficiencies in outpatient management and follow-up. DHMH will begin to monitor potentially avoidable admissions through AHRQ's Prevention Quality Indicators (PQIs) methodology, which looks for specific primary diagnoses in hospital admission records indicating the conditions listed in each PQI. The measures presented are as follows[8]:

[8] AHRQ PQI Methodology Version 4.3

- PQI #1: Diabetes Short-Term Complications
- PQI #2: Perforated Appendix
- PQI #3: Diabetes Long-Term Complications
- PQI #5: Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults
- PQI #7: Hypertension
- PQI #8: Congestive Heart Failure
- PQI #10: Dehydration
- PQI #11: Bacterial Pneumonia
- PQI #12: Urinary Tract Infection
- PQI #13: Angina Without Procedure
- PQI #14: Uncontrolled Diabetes
- PQI #15: Asthma in Younger Adults
- PQI #16: Lower-Extremity Amputation in Patients With Diabetes
- PQI #90[9]: Prevention Quality Overall Composite
- PQI #91[10]: Prevention Quality Acute Composite
- PQI #92[11]: Prevention Quality Chronic Composite

The measure denominators include the number of HealthChoice participants who meet the following enrollment criteria:

- Aged 18 to 64 years as of December 31 of the CY
    - For PQI #5: Aged 40 to 64 years as of December 31 of the CY
    - For PQI #15: Aged 18 to 39 years as of December 31 of the CY
- Enrolled in the same HealthChoice MCO as of December 31 of the CY as the MCO that paid for the inpatient admission qualifying them for a PQI designation.

Table 7 presents the percentage of HealthChoice participants, aged 18 to 64 years, with any period of HealthChoice enrollment, with any PQI-designated discharge for CY 2009 through CY 2013. Rates for COPD or Asthma in Older Adults (PQI #5) were the highest throughout the evaluation period, followed by the rates of Asthma in Younger Adults (PQI #15). The rates for

[9] PQI #90 includes PQI #s 1, 3, 5, 7, 8, 10, 11, 12, 13, 14, 15, and 16.
[10] PQI #91 includes PQI #s 10, 11, and 12.
[11] PQI #92 includes PQI #s 1, 3, 5, 7, 8, 13, 14, 15, and 16.

Perforated Appendix Admissions (PQI #2), Angina without Procedure Admissions (PQI #13), Uncontrolled Diabetes Admissions (PQI #14), and Lower-Extremity Amputation in Patients with Diabetes (PQI #16) were negligible across the evaluation period.

Table 7. Potentially Avoidable Admissions Rate for Participants Aged 18 – 64 Years (Any Period of Enrollment), CY 2009 – CY 2013

Any PQI #	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
1: Diabetes Short-Term Complications Admissions	0.1%	0.1%	0.1%	0.1%	0.1%
2: Perforated Appendix Admissions	0.0%	0.0%	0.0%	0.0%	0.0%
3: Diabetes Long-Term Complications Admissions	0.2%	0.2%	0.1%	0.1%	0.1%
5: COPD or Asthma in Older Adults Admissions (Ages 40-64)	3.4%	2.8%	2.6%	3.1%	2.7%
7: Hypertension Admissions	0.1%	0.1%	0.1%	0.0%	0.0%
8: Congestive Heart Failure Admissions	0.3%	0.2%	0.2%	0.1%	0.1%
10: Dehydration Admissions	0.2%	0.1%	0.1%	0.1%	0.1%
11: Bacterial Pneumonia Admissions	0.4%	0.3%	0.3%	0.2%	0.2%
12: Urinary Tract Infection Admissions	0.2%	0.2%	0.1%	0.1%	0.1%
13: Angina Without Procedure Admissions	0.0%	0.0%	0.0%	0.0%	0.0%
14: Uncontrolled Diabetes Admissions	0.0%	0.0%	0.0%	0.0%	0.0%
15: Asthma in Younger Adults Admissions (Ages 18-39)	2.4%	1.9%	2.1%	2.2%	2.1%
16: Lower-Extremity Amputation In Patients With Diabetes	0.0%	0.0%	0.0%	0.0%	0.0%
90: Prevention Quality Overall Composite	**1.9%**	**1.6%**	**1.4%**	**1.2%**	**1.1%**
91: Prevention Quality Acute Composite	**0.7%**	**0.6%**	**0.5%**	**0.4%**	**0.4%**
92: Prevention Quality Chronic Composite	**1.2%**	**1.0%**	**0.9%**	**0.8%**	**0.7%**

Table 8 presents the number and percentage of participants with PQI admissions. Overall, the percentage of participants with at least one admission with a PQI designation increased from 8.7 percent in CY 2009 to 14.3 percent in CY 2013.

Table 8. Potentially Avoidable Admission Rates, Participants Aged 18 – 64 Years (Any Period of Enrollment), CY 2009 – CY 2013

Year	# of Participants	# of Participants With ≥1 Admissions	% of Participants	# of Participants with Any PQI	% of Participants	# of Participants With ≥1 Admissions that Include Any PQI	% of Participants
CY 2009	256,581	24,852	9.7%	4,995	1.9%	433	8.7%
CY 2010	311,658	31,007	9.9%	5,047	1.6%	494	9.8%
CY 2011	346,844	35,066	10.1%	4,851	1.4%	512	10.6%
CY 2012	364,523	40,365	11.1%	4,291	1.2%	487	11.3%
CY 2013	378,862	51,759	13.7%	4,205	1.1%	603	14.3%

Section II Summary

This section of the report addressed the extent to which HealthChoice provides participants with a medical home by assessing appropriateness of service utilization. In reviewing appropriateness of care, potentially avoidable ED visits decreased during the evaluation period. The potentially avoidable admission rate for COPD or Asthma in Older Adults was the highest PQI throughout the evaluation period. The percentage of participants with at least one admission with a PQI designation increased 5.6 percentage points between CY 2009 and CY 2013.

Section III. Quality of Care

Another goal of the HealthChoice program is to improve the quality of health services delivered. DHMH has an extensive system for quality measurement and improvement that uses nationally recognized performance standards. Quality activities include the External Quality Review Organizations (EQRO) annual report, CAHPS survey of consumer satisfaction, value-based purchasing (VBP) program, and Healthcare Effectiveness Data and Information Set (HEDIS) quality measurements. HEDIS data are validated by nationally certified vendors to ensure that all plan participants collect data using an identical methodology, which allows for meaningful comparisons across health plans. DHMH also reviews a sample of medical records to ensure that MCOs meet EPSDT standards. This section of the report presents highlights of these quality improvement activities related to preventive care and care for chronic conditions.

Due to 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. An "=" sign indicates that Maryland's rate is equal to the national HEDIS mean.

Preventive Care

HEDIS Childhood Measures

DHMH uses HEDIS measures to report childhood immunization and well-child visit rates. Immunizations are evidence-based interventions that safely and effectively prevent severe illnesses, such as polio and hepatitis (HealthcareData Company, LLC, 2014). The HEDIS immunization measures include the percentage of two-year-olds who received the following immunizations on or before their second birthday: four diphtheria, tetanus, and acellular pertussis (DTaP); three polio (IPV); one measles, mumps, and rubella (MMR); three H influenza type B (Hib); three hepatitis B; one chicken pox (VZV); and four pneumococcal conjugate (PCV) vaccines. HEDIS calculates a rate for each vaccine and nine different combination rates. Immunization combination two includes all of these vaccines except the four PCV, and combination three includes each of the above listed vaccines with its appropriate number of doses. DHMH compares health plan rates for immunization combinations two and three.

The HEDIS well-child measures include the following:

- The percentage of infants who turned 15 months old during the calendar year who received at least five well-child visits during their first 15 months of life
- The percentage of children aged three to six years who received at least one well-child visit annually
- The percentage of adolescents aged 12 to 21 years who received at least one well-care visit annually

Table 9 presents the immunization and well-child measures for the HealthChoice population. HealthChoice performed above the national HEDIS mean across all measures from CY 2009 through CY 2013. Within the HealthChoice program:

- The percentage of two-year-old children receiving immunization combination two increased by nearly 1 percentage point during the measurement period
- The percentage of two-year-old children receiving immunization combination three increased by 3 percentage points during the measurement period
- The percentage of 15-month-old infants who received at least five well-child visits increased by 2.5 percentage points during the measurement period
- The percentage of children aged three to six years who received at least one well-child visit increased by 2.2 percentage points during the measurement period
- The percentage of adolescents aged 12 to 21 years who received at least one well-care visit increased by 4.7 percentage points during the measurement period

Childhood immunizations-combination 3, well-child visits for 3 to 6 year olds, and well-care visits for adolescents are a part of the VBP program, which may have contributed to the increase in these rates.

Table 9. HEDIS Immunizations and Well-Child Visits: HealthChoice Compared with the National HEDIS Mean, CY 2009-CY 2013

HEDIS MEASURES	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Childhood Immunizations- Combination 2					
HealthChoice	80.2%	79.9%	82.5%	80.2%	80.9%
National HEDIS Mean	+	+	+	+	+
Childhood Immunizations- Combination 3					
HealthChoice	76.0%	76.3%	79.7%	77.7%	79.1%
National HEDIS Mean	+	+	+	+	+
Well Child Visits - 15 Months of Life					
HealthChoice	83.2%	82.4%	85.0%	83.9%	85.7%
National HEDIS Mean	+	+	+	+	+
Well Child Visits - 3 to 6 year olds					
HealthChoice	81.8%	80.7%	85.0%	82.2%	84.0%
National HEDIS Mean	+	+	+	+	+
Well-Care Visits - Adolescents					
HealthChoice	62.6%	62.8%	67.0%	65.4%	67.3%
National HEDIS Mean	+	+	+	+	+

EPSDT Review

The EPSDT program is a required package of benefits for all Medicaid participants under the age of 21 years. The purpose of EPSDT is to ensure that children receive appropriate age-specific physical examinations, developmental assessments, and mental health screenings periodically to identify any deviations from expected growth and development in a timely manner. Maryland's EPSDT program aims to support access and increase the availability of quality health care. The goal of the EPSDT review is to examine whether EPSDT services are provided to HealthChoice beneficiaries in a timely manner. The review is conducted annually to assess HealthChoice provider compliance with the following five EPSDT components:

- *Health and developmental history*: A personal and family medical history helps the provider determine health risks and provide appropriate anticipatory guidance and laboratory testing.
- *Comprehensive physical exam*: The exam includes vision and hearing tests, oral assessment, nutritional assessment, and measurements of head circumference and blood pressure.
- *Laboratory tests/at-risk screenings*: These tests involve assessing the risk factors related to heart disease, anemia, tuberculosis, lead exposure, and sexually transmitted infections.
- *Immunizations*: Providers who serve HealthChoice participants must offer immunizations according to DHMH's recommended childhood immunization schedule.
- *Health education/anticipatory guidance*: Maryland requires providers to discuss at least three topics during a visit, such as nutrition, injury prevention, and social interactions. Referrals for dental care are required after a patient turns two years old.

Between CY 2009 and CY 2013, provider compliance increased for two of the five EPSDT components (Table 10). These components are health and developmental history and health education/anticipatory guidance. Between CY 2012 and CY 2013, all five EPSDT components either decreased or remained constant (Delmarva Foundation, 2015; Delmarva Foundation, 2014; Delmarva Foundation, 2011).

Table 10. HealthChoice MCO Aggregate Composite Scores for Components of the EPSDT Review, CY 2009–CY 2013

EPSDT Components	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Health and Developmental History	86%	89%	89%	89%	89%
Comprehensive Physical Exam	93%	88%	92%	93%	91%
Laboratory Tests/At-Risk Screenings	80%	82%	79%	80%	77%
Immunizations	85%	89%	88%	86%	84%
Health Education/Anticipatory Guidance	88%	90%	90%	92%	89%

Childhood Lead Testing

DHMH 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 Eliminate Childhood Lead Poisoning includes a goal of ensuring that young children receive appropriate lead risk screening and blood lead testing. As part of the work plan for achieving this goal, DHMH provides the MCOs with quarterly reports on children who received blood lead tests and children with elevated blood lead levels to ensure that these children may receive appropriate follow-up. DHMH also includes blood lead testing measures in several of its quality assurance activities, including the VBP and managing-for-results programs.

As part of the EPSDT benefits, Medicaid requires that all children receive a blood lead test at 12 and 24 months of age. DHMH measures the lead testing rates for children aged 12 through 23 months and 24 through 35 months who are continuously enrolled in the same MCO for at least 90 days.[12] A child's lead test must have occurred during the calendar year or the year prior. For CY 2011, the lead test measure was revised to exclude children who disenrolled from HealthChoice before their birthday. Thus, the lead testing rates for CY 2009 and CY 2010 are not comparable to the results of subsequent years.

Table 11 presents the lead testing rates for children aged 12 through 23 months and 24 through 35 months between CY 2009 and CY 2012. In CY 2013, the lead testing rate was 58.7 percent for children aged 12 through 23 months and 76.6 percent for children aged 24 through 35 months.

Table 11. 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 2009–CY 2013

Age Group (Months)	CY 2009*	CY 2010*	CY 2011	CY 2012	CY 2013
12 - 23 Months	55.5%	57.5%	57.4%	57.9%	58.7%
24 - 35 Months	75.7%	75.6%	76.6%	75.6%	76.6%

***** The measure was revised in CY 2011 to exclude children who disenrolled before their birthday. Thus, CY 2009 and CY 2010 results cannot be compared with subsequent years.

Breast Cancer Screening

According to the Centers for Disease Control and Prevention (CDC), mammograms are the most effective technique for detecting breast cancer early (CDC, 2014). The CDC reported a prevalence of breast cancer of 122.0 cases per 100,000 women in 2011, the most recent data

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

available (U.S. Cancer Statistics Working Group, 2014). Breast cancer is the most prevalent type of cancer among women (U.S. Cancer Statistics Working Group, 2014). When breast cancer is detected early, it is easier to treat, and women have a greater chance of survival (CDC, 2014). HEDIS assesses the percentage of women who received a mammogram within a two-year period. Although there has been recent debate regarding the appropriate age requirements for mammograms, HEDIS continues to utilize the 40- to 69-year-old female cohort for this measure.

Table 12 presents the percentage of women in HealthChoice who received a mammogram for breast cancer screening in CY 2009 through CY 2013 (HealthcareData Company, LLC, 2014). Between CY 2009 and CY 2013, the percentage of women aged 40 through 64 years[13] who received a mammogram increased by nearly 9 percentage points. Maryland performed below the national HEDIS mean in all years in the measurement period, except for CY 2013.

Table 12. Percentage of Women in HealthChoice Aged 40-64 Years who Received a Mammogram for Breast Cancer Screening, Compared with the National HEDIS Mean, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Percentage of Women in HealthChoice Aged 40-64 Years who Received a Mammogram	49.5%	48.3%	50.3%	51.0%	58.3%
National HEDIS Mean	-	-	-	-	+

Cervical Cancer Screening

Cervical cancer is preventable and treatable, and the CDC recommends Papanicolaou (Pap) tests for cervical cancer screening in women who are sexually active or over the age of 21 years (CDC, n.d.c). Because Pap screenings can detect precancerous cells early, cervical cancer can be treated or prevented (CDC, n.d.c). HEDIS measures the percentage of women who received at least one Pap test within a three-year period to screen for cervical cancer.

Table 13 presents the percentage of women aged 21 to 64 years in HealthChoice who received a cervical cancer screening in CY 2009 through CY 2013 (HealthcareData Company, LLC, 2014). Between CY 2009 and CY 2013, the cervical cancer screening rate increased by 7 percentage points. HealthChoice performed above the national HEDIS mean throughout the measurement period. Cervical cancer screenings are a part of the VBP program, which may explain the improving performance of HealthChoice on this measure.

[13] Maryland's HealthChoice program covers individuals through age 64 years.

Table 13. Percentage of Women in HealthChoice Aged 21–64 Years who Received a Cervical Cancer Screening, Compared with the National HEDIS Mean, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Percentage of Women in HealthChoice Aged 21-64 Years who Received a Cervical Cancer Screening	68.1%	73.2%	73.1%	73.7%	75.2%
National HEDIS Mean	+	+	+	+	+

Care for Chronic Conditions

Use of Appropriate Medications for People with Asthma

DHMH uses HEDIS measures to report the use of appropriate medications for people with asthma. Asthma is a common chronic disease that affects more than 32 million American children and adults (CDC, n.d.b). In 2010, approximately 752,000 adults and children in Maryland had a history of asthma (Bankoski, De Pinto, Hess-Mutinda, & McEachern, 2012). The purpose of asthma medications is to prevent or reduce airway inflammation and narrowing. If appropriate asthma medications are prescribed and used correctly, asthma-related hospitalizations, ED visits, and missed school and work days decrease (CDC, n.d.c).

Table 14 presents the HealthChoice rate of appropriate medications for people with asthma in CY 2009 through CY 2013 (HealthcareData Company, LLC, 2013 and HealthcareData Company, LLC, 2014). For CY 2009 and CY 2010, the measure was restricted to individuals in HealthChoice aged 5 through 50 years. Beginning in CY 2011, the measure was expanded to include individuals through age 64. Because of the differences in the age requirements, CY 2009 – CY 2010 results should not be compared to CY 2011 – CY 2013 results. In CY 2013, 86.7 percent of HealthChoice participants aged 5 through 64 years were appropriately prescribed medications for asthma treatment, a 6.4 percentage point decrease from CY 2011. Despite the drop, the program still outperformed the national average rate.

Table 14. Percentage of HealthChoice Members Aged 5–64 Years with Persistent Asthma who were Appropriately Prescribed Medications, Compared with the National HEDIS Mean, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011*	CY 2012	CY 2013
	Members Aged 5-50 Years		Members Aged 5-64 Years		
Percentage of HealthChoice Members Aged 5-64 Years with Persistent Asthma who were Appropriately Prescribed Medications	90.7%	90.8%	93.1%	89.4%	86.7%
National HEDIS Mean	**	**	+	+	+

* HEDIS specifications were revised in 2012 (CY 2011 data), and the age range was modified.
** National HEDIS means are not available for the age range of 5-50 years.

Comprehensive Diabetes Care

Diabetes is a disease caused by the inability of the body to make or use the hormone insulin. The complications of diabetes are serious and include heart disease, kidney disease, stroke, and blindness. Screening and treatment can reduce the burden of diabetes complications (HealthcareData Company, LLC, 2013). To assess appropriate and timely screening and treatment for adults with diabetes (types 1 and 2), HEDIS includes a composite set of measures, referred to as comprehensive diabetes care, which include:

- *HbA1c Testing*: The percentage of participants aged 18 through 64 years with diabetes who received at least one hemoglobin A1c (HbA1c) test during the measurement year.
- *Eye Exams*: The percentage of participants aged 18 through 64 years with diabetes who received an eye exam for diabetic retinal disease during the measurement year *or* had a negative retinal exam (i.e., no evidence of retinopathy) in the year prior to the measurement year. This measure is a part of the VBP program.
- *LDL-C Screening*: The percentage of participants aged 18 through 64 years with diabetes who received at least one low-density lipoprotein cholesterol (LDL-C) screening in the measurement year.

Table 15 presents annual HealthChoice performance on the comprehensive diabetes care measures for CY 2009 through CY 2013 (HealthcareData Company, LLC, 2014). HealthChoice consistently performed above the national HEDIS mean on eye exams throughout the evaluation period and performed above the mean for LDL-C screenings in most years. HealthChoice performed above the national average on HbA1c testing in CY 2013. However, it is worth noting that the HealthChoice participants evaluated for this measure are 18-64 years old, while the HEDIS measure used as a benchmark evaluates adults 18-75 years old. Within the HealthChoice program:

- The percentage of participants with diabetes who received an eye exam increased by 2.7 percentage points during the measurement period.
- The percentage of participants with diabetes who received an HbA1c test increased by 8.4 percentage points during the measurement period.
- The percentage of participants with diabetes who received an LDL-C screening increased by 2.3 percentage points during the measurement period.

Table 15. Percentage of HealthChoice Members Aged 18–64 Years with Diabetes who Received Comprehensive Diabetes Care, Compared with the National HEDIS Mean, CY 2009–CY 2013

HEDIS MEASURES	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Eye Exam (Retinal)					
HealthChoice	66.6%	67.9%	71.0%	69.6%	69.3%
National HEDIS Mean	+	+	+	+	+
HbA1c Test					
HealthChoice	77.1%	77.6%	81.0%	81.2%	85.5%
National HEDIS Mean	-	-	-	-	+
LDL-C Screening					
HealthChoice	74.9%	74.3%	76.4%	75.7%	77.2%
National HEDIS Mean	+	-	+	+	+

Source: HealthcareData Company, LLC., September 2014

Section III Summary

This section of the report discussed the HealthChoice goal of improving quality of care and focused on preventive care and care for chronic conditions. Regarding preventive care for children, HealthChoice well-child visit and immunization combination two and three rates increased from CY 2009 and were consistently higher than the national HEDIS mean. Regarding EPSDT, provider compliance increased for two of the five components. Regarding preventive care for adults, rates of cervical and breast cancer screening improved during the evaluation period. From CY 2009 to CY 2013, the cervical cancer screening rate increased by 7 percentage points, while the breast cancer screening rate increased by nearly 9 percentage points.

This section also examined the quality of care for chronic conditions, specifically asthma and diabetes. The percentage of participants receiving appropriate asthma medications decreased between CY 2009 and CY 2013. For participants with diabetes, rates of eye exams, HbA1c testing, and LDL-C screening improved during the evaluation period. The HbA1c testing rates rose above the national HEDIS mean for the first time during the evaluation period in CY 2013, whereas the LDL-C screening rates performed above the national means in most years, and eye exams exceeded national means in all years.

Section IV. Special Topics

This section of the report discusses several special topics, including services provided under the dental and mental health carve-outs, SUD services, services provided to children in foster care, reproductive health services, services provided to individuals with HIV/AIDS, the REM program, and access to care for racial/ethnic minorities.

Dental Services

EPSDT mandates dental care coverage for children younger than 21 years. Children enrolled in Maryland Medicaid, however, have historically utilized these services at a low rate. Before Maryland implemented HealthChoice in 1997, only 14 percent of children enrolled in Medicaid for any period of time received at least one dental service, which was below the national average of 21 percent (American Academy of Pediatrics, n.d.).

In an effort to increase access to oral health care and service utilization, the Secretary of DHMH convened the Dental Action Committee (DAC) in June 2007. The DAC consisted of a broad-based group of stakeholders concerned about children's access to oral health services. The DAC reviewed dental reports and data and presented its final report to the DHMH Secretary on September 11, 2007. Key recommendations from the report included increased reimbursement for Medicaid dental services and the institution of a single dental administrative services organization (ASO) (Dental Action Committee, 2007). The reforms recommended by the DAC have been supported and, to a great extent, implemented by DHMH to effectively address the barriers to dental care access previously experienced in the State. Expanded access to dental care also has been achieved through initiatives of the Medicaid program and the Office of Oral Health. These include:

- Increasing dental provider payment rates in 2008, with plans to increase rates further as the budget allows.
- Implementing an ASO in July 2009 to oversee Medicaid dental benefits for pregnant women, children, and adults in the REM program (the Maryland Healthy Smiles program).
- Authorizing EPSDT-certified medical providers (pediatricians, family physicians, and nurse practitioners), after successful completion of an Office of Oral Health training program, to receive Medicaid reimbursement for fluoride varnish treatment and oral assessment services provided to children between 9 and 36 months of age. As of FY 2013, 441 unique EPSDT-certified providers administered more than 84,000 fluoride varnish treatments (Goodman, 2013).
- Allowing public health dental hygienists to perform services within their scope of practice without on-site supervision and prior examination of the patient by a dentist. This change permits public health dental hygienists to provide services outside of a dental

office, e.g., in schools and Head Start centers. (Maryland Department of Health and Mental Hygiene, 2010).

Maryland's current oral health achievements are a direct result of the State's progress in implementing the 2007 DAC recommendations, which called for increasing access to oral health services through changes to Maryland Medicaid and expansion of the public health dental infrastructure. In 2010 and 2011, the Pew Center on the States named Maryland a national leader in improving dental care access for Maryland residents with low income, especially the Medicaid-eligible and uninsured. Because Maryland is the only state to meet seven of the eight dental policy benchmarks, the Pew Center ranked it first in the nation for oral health (Pew Center on the States, 2011). CMS also recognized Maryland's improved oral health service delivery by asking Maryland to share its story at a CMS national quality conference in August 2011, including achievements in its best practices guide for states and their governors through the Medicaid State Technical Assistance Team (MSTAT) process. In addition, Maryland was invited to present in the inaugural *CMS Learning Lab: Improving Oral Health through Access* web seminar series.

However, even with these substantial improvements, concerns about access remain. At the conclusion of the 2013 legislative session, the Maryland General Assembly requested DHMH to provide a report on the utilization of pediatric dental surgery, one of the mandated dental services under EPSDT. The goal of pediatric restorative dental surgery is to repair or limit the damage from caries, protect and preserve the tooth structure, reestablish adequate function, restore esthetics (where applicable), and provide ease in maintaining good oral hygiene. Although this procedure is preventable, children need to be able to access this in a timely manner, if warranted, in order to maintain good health. In its report, DHMH made several recommendations designed to improve access to pediatric dental surgery including:

- Increasing the payment rate for anesthesia (CPT code 00710) to 100 percent of the Medicare rate.
- Recommending that hospitals offer operating room (OR) block times for dental cases to improve access to hospital facilities by dentists.
- Establishing a facility rate to pay ambulatory surgery centers (ASCs) in order to increase the number of sites where dentists may perform OR procedures and reduce pressure on hospitals.
- Continuing to improve access to preventive dental care in order to reduce the need for non-preventive procedures.
- Requiring hospitals to report stipends paid to hospital-based physicians and anesthesiologists as part of a larger analysis conducted by DHMH in partnership with the Health Services Cost Review Commission (HSCRC) of the proper reimbursement rate for providers.

DHMH continually monitors a variety of measures of dental service utilization, published in the Annual Oral Health Legislative Report. Table 16 displays a measure for Medicaid children's dental service utilization. The dental service utilization rate among children aged 4 to 20 years increased by 7.4 percentage points between CY 2009 and CY 2013. Nevertheless, many children still do not receive the dental services they need.

Table 16. Children Aged 4–20 Years in Medicaid (Enrolled for at least 320 Days) Receiving a Dental Visit, CY 2009–CY 2013

Year	Total Number of Enrollees	Number of Enrollees Receiving at least One Visit	Percentage Receiving a Visit
CY 2009	301,582	183,648	60.9%
CY 2010	333,167	213,714	64.1%
CY 2011	362,197	241,365	66.6%
CY 2012	385,132	261,077	67.8%
CY 2013	405,873	277,272	68.3%

Source: Dental Joint Chairmen's Report Data, Calendar Year 2013 Memorandum

Dental care is also a benefit for pregnant women. Table 17 presents the percentage of pregnant women aged 21 years and older who were enrolled for at least 90 days in Medicaid and received at least one dental visit between CY 2009 and CY 2013. During that time period, dental service utilization initially increased from 28.3 percent in CY 2009 to 32.5 percent in CY 2011, and then decreased to 27.4 percent in CY 2013.

Table 17. Percentage of Pregnant Women Aged 21+ Years in Medicaid* (Enrolled for at Least 90 Days) Receiving a Dental Visit, CY 2009–CY 2013

Year	Total Number of Enrollees	Number of Enrollees Receiving at least One Visit	Percentage Receiving a Visit
CY 2009	17,402	4,931	28.3%
CY 2010	19,837	5,875	29.6%
CY 2011	20,572	6,689	32.5%
CY 2012	21,708	6,537	30.1%
CY 2013	22,286	6,113	27.4%

*The study population for CY 2009 through CY 2013 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: S09 (PAC program), X02 (undocumented or unqualified immigrants), W01 (Women's Breast and Cervical Cancer Health Program), and P10 (Family Planning Program).

Mental Health Services

HealthChoice participants in need of mental health services are referred to Maryland's Public Mental Health System, but they continue to receive medically necessary somatic care through their MCOs. Mental health services are funded through the FFS Maryland Behavioral Health Administration using the mental health ASO.

Table 18 presents the percentage of the HealthChoice population diagnosed with and/or treated for a mental health disorder (MHD)[14] by age group. The percentage of children and adolescents with an MHD has gradually increased over the evaluation period (from 18.1 percent to 20.4 percent). The percentage of adults with an MHD has been more stable, indicating that the overall increase in MHD diagnoses and treatment has been mainly driven by children and adolescents.

Table 18. Percentage of HealthChoice Population (Any Period of Enrollment) with an MHD by Age Group, CY 2009–CY 2013

Age Group (Years)	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
0 - 18	18.1%	18.4%	18.9%	19.8%	20.4%
19 - 64	28.3%	27.7%	27.5%	27.7%	27.5%
Total	**21.3%**	**21.6%**	**22.0%**	**22.7%**	**23.0%**

Table 19 presents the regional distribution of HealthChoice participants with an MHD. While the percentage has remained relatively stable in the rural areas of Maryland, the percentage of individuals with an MHD in Baltimore City has shown a gradual decline, with a corresponding increase in the Baltimore and Washington Suburban regions.

[14] Individuals are identified as having an MHD if they have any ICD-9 diagnosis codes that begin with 290, 293-302, 306- 316, or an invoice control number (ICN) beginning with "6" denoting a specialty mental health claim.

Table 19. Regional Distribution of HealthChoice Participants (Any Period of Enrollment) with an MHD, CY 2009–CY 2013

Region	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Baltimore City	28.8%	27.5%	26.4%	26.2%	25.1%
Baltimore Suburban	27.5%	28.3%	28.7%	28.7%	28.8%
Eastern Shore	11.9%	12.1%	12.4%	12.2%	11.8%
Southern Maryland	4.6%	4.7%	4.6%	4.6%	4.8%
Washington Suburban	19.9%	20.2%	20.8%	21.3%	22.4%
Western Maryland	7.3%	7.1%	7.0%	7.0%	7.0%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Enrollees	**158,599**	**179,958**	**196,285**	**211,223**	**218,956**

DHMH monitors the extent to which participants with an MHD access somatic services through their MCOs. Table 20 presents the percentage of HealthChoice participants with an MHD who visited a physician or an ED for somatic care. A large majority of participants with an MHD had at least one visit to a physician for somatic care for each year of the evaluation period, with the percentage increasing by 1.9 percentage points between CY 2009 and CY 2013. By contrast, fewer than half of individuals with an MHD visited an ED for somatic care each year of the evaluation period.

Table 20. Service Utilization among HealthChoice Participants (Any Period of Enrollment) with an MHD, CY 2009–CY 2013

Year	Number of HealthChoice Participants with an MHD	Percentage with a Physician Visit for Somatic Care	Percentage with an ED Visit for Somatic Care
CY 2009	158,599	85.3%	40.9%
CY 2010	179,958	85.4%	39.6%
CY 2011	196,285	86.6%	43.5%
CY 2012	211,223	87.0%	43.4%
CY 2013	218,956	87.2%	42.8%

Substance Use Disorder Services

SUD[15] services were provided under the HealthChoice MCO benefit package during this measurement period. Table 21 shows the percentage of HealthChoice participants diagnosed

[15] Individuals were identified as having an SUD if they had a diagnosis code that met the HEDIS *"Identification of Alcohol and Other Drug Services"* measure, which includes the following ICD-9 diagnosis codes:291-292, 303-304, 305.0, 305.2-305.9, 535.2, 571.1; MS-DRG 894-897; and ICD-9-CM Procedure 94.6x with an inpatient code.

with and/or treated for an SUD by age group. Overall, the percentage of enrollees with an SUD increased by 0.5 percentage points between CY 2009 and CY 2013.

Table 21. Percentage of HealthChoice Population (Any Period of Enrollment) with an SUD by Age Group, CY 2009 – CY 2013

Age Group (Years)	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
0 - 18	0.9%	0.9%	0.9%	0.9%	0.8%
19 - 64	11.2%	11.1%	10.7%	10.8%	11.1%
Total	**4.1%**	**4.4%**	**4.4%**	**4.5%**	**4.6%**

Table 22 presents the regional distribution of HealthChoice participants with an SUD. Between CY 2009 and CY 2013, the majority of participants with an SUD lived in Baltimore City, followed by the Baltimore Suburban region.

Table 22. Regional Distribution of HealthChoice Participants (Any Period of Enrollment) with an SUD, CY 2009–CY 2013

Region	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Baltimore City	42.9%	40.2%	38.1%	37.3%	36.7%
Baltimore Suburban	25.3%	26.1%	26.8%	27.0%	27.3%
Eastern Shore	11.0%	11.5%	11.8%	11.9%	12.2%
Southern Maryland	3.5%	4.2%	5.0%	4.8%	5.1%
Washington Suburban	11.1%	11.8%	12.1%	12.5%	11.9%
Western Maryland	6.3%	6.1%	6.3%	6.5%	6.7%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Enrollees	**30,715**	**36,854**	**39,574**	**42,063**	**44,103**

DHMH also monitors the extent to which participants with an SUD access somatic care services. Table 23 compares the percentage of HealthChoice participants with an SUD who received a physician visit for somatic care with the percentage who received an ED visit for somatic care. Between CY 2009 and CY 2013, the percentage of participants with a physician visit for somatic care increased by 1.5 percentage points, whereas the rate for ED visits for somatic care increased by 8.9 percentage points.

Table 23. Service Utilization of HealthChoice Participants (Any Period of Enrollment) with an SUD, CY 2009–CY 2013

Year	Number of HealthChoice Participants with an SUD	Percentage with a Physician Visit for Somatic Care	Percentage with an ED Visit for Somatic Care
CY 2009	30,715	79.0%	52.8%
CY 2010	36,854	79.0%	52.8%

CY 2011	39,574	80.2%	61.0%
CY 2012	42,063	80.9%	61.2%
CY 2013	44,103	80.5%	61.7%

Table 24 shows the number and percentage of HealthChoice participants with an SUD and at least one methadone replacement therapy. Between CY 2009 and CY 2013, the percentage of participants with at least one methadone replacement therapy increased by 3.8 percentage points.

Table 24. Number and Percentage of HealthChoice Participants (Any Period of Enrollment) with an SUD and at Least One Methadone Replacement Therapy, CY 2009–CY 2013

Year	Number of HealthChoice Participants with an SUD	Number of Participants with an SUD and Methadone Replacement Therapy	Percentage of Participants with an SUD who received Methadone Replacement Therapy
CY 2009	30,715	6,062	19.7%
CY 2010	36,854	7,837	21.3%
CY 2011	39,574	8,787	22.2%
CY 2012	42,063	9,520	22.6%
CY 2013	44,103	10,365	23.5%

Behavioral Health Integration

Table 25 presents the number and percentage of participants in CY 2009 through CY 2013 with a dual diagnosis, MHD only, SUD only, or none of these diagnoses. The percentage of HealthChoice participants with a dual diagnosis of MHD and SUD remained fairly stable—just below 3 percent— throughout the study period.

Table 25. Number and Percentage of HealthChoice Participants (Any Period of Enrollment) with a Dual Diagnosis of MHD and SUD, CY 2009 - CY 2013

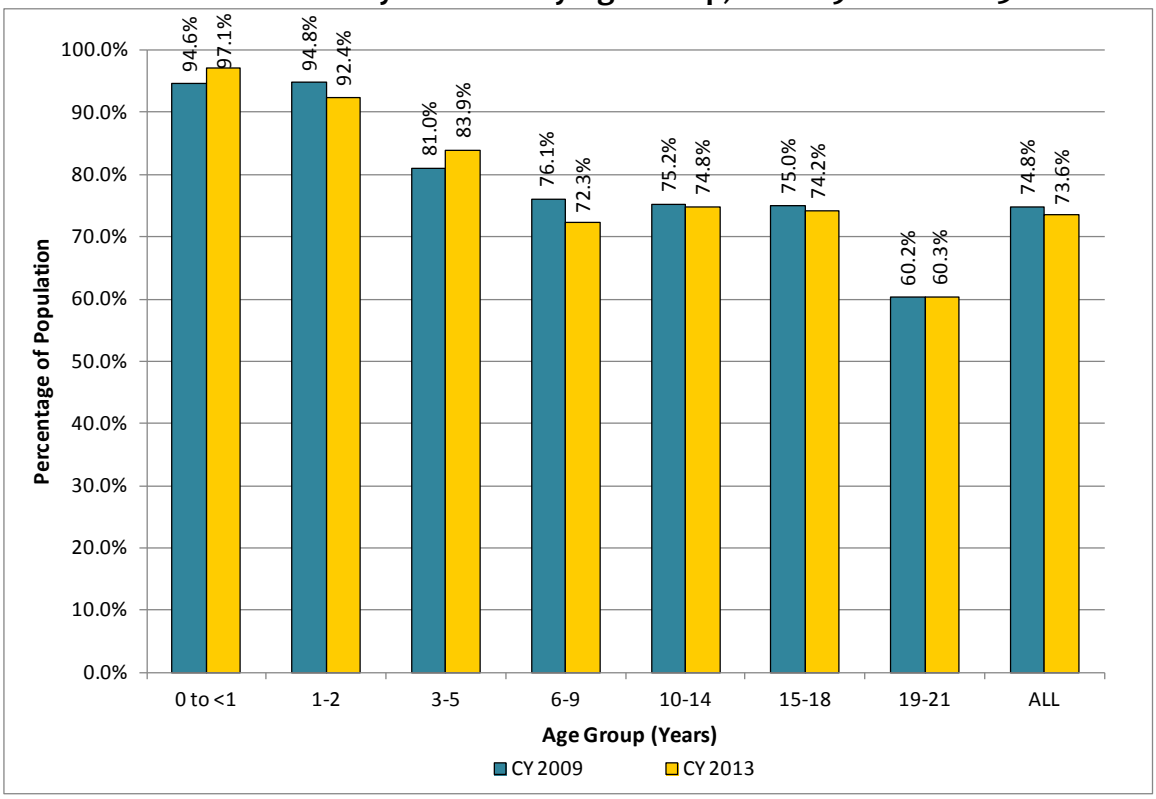
Year	Dual Diagnosis (MH and SUD)	MHD Only	SUD Only	None	Total
CY 2009	19,576 (2.6%)	139,023 (18.7%)	11,139 (1.5%)	573,118 (77.2%)	**742,856 (100%)**
CY 2010	23,527 (2.8%)	156,431 (18.8%)	13,327 (1.6%)	639,063 (76.8%)	**832,348 (100%)**
CY 2011	24,453 (2.7%)	171,832(19.2%)	15,121(1.7%)	681,571 (76.3%)	**892,977 (100%)**
CY 2012	26,049 (2.8%)	185,174(19.9%)	16,014 (1.7%)	703,410 (75.6%)	**930,647 (100%)**
CY 2013	27,127 (2.8%)	193,429 (20.1%)	16,976 (1.8%)	724,065 (75.3%)	**961,597 (100%)**

Access to Care for 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.[16] The section also compares service utilization for children in foster care with other HealthChoice children. Unless otherwise specified, all of the measures presented include children aged 0 through 21 years and include their use of FFS and MCO services.

Figure 10 presents the percentage of children in foster care who had at least one ambulatory care visit in CY 2009 and CY 2013 by age group. From CY 2009 to CY 2013, the overall rate of ambulatory care visits decreased slightly. Younger children were more likely to receive ambulatory care services when compared to older children.

Figure 10. Percentage of HealthChoice Children in Foster Care Receiving at Least One Ambulatory Care Visit by Age Group, CY 2009 and CY 2013



[16] Children in the subsidized adoption program are *excluded* from the definition of foster children. Rather, these enrollees are included as "other children enrolled in HealthChoice."

Figure 11 compares the ambulatory care visit rate for children in foster care with the rate for other children enrolled in HealthChoice in CY 2013. Overall, children in foster care accessed ambulatory care at a lower rate than other children in HealthChoice. However, children aged 0 to 2 years accessed ambulatory care services at a higher rate than other children in the HealthChoice program.

Figure 11. Percentage of HealthChoice Children in Foster Care vs. Other HealthChoice Children Receiving at Least One Ambulatory Care Visit by Age Group, CY 2013

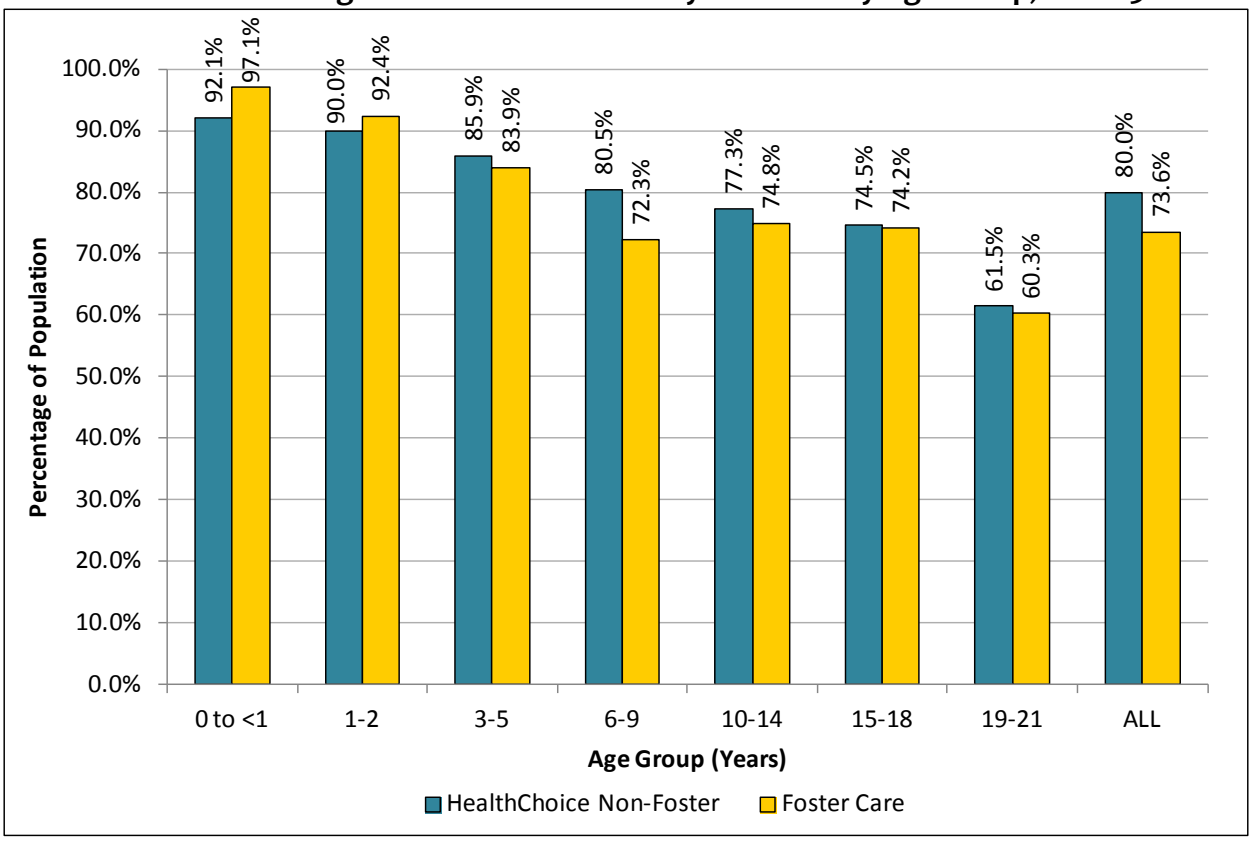
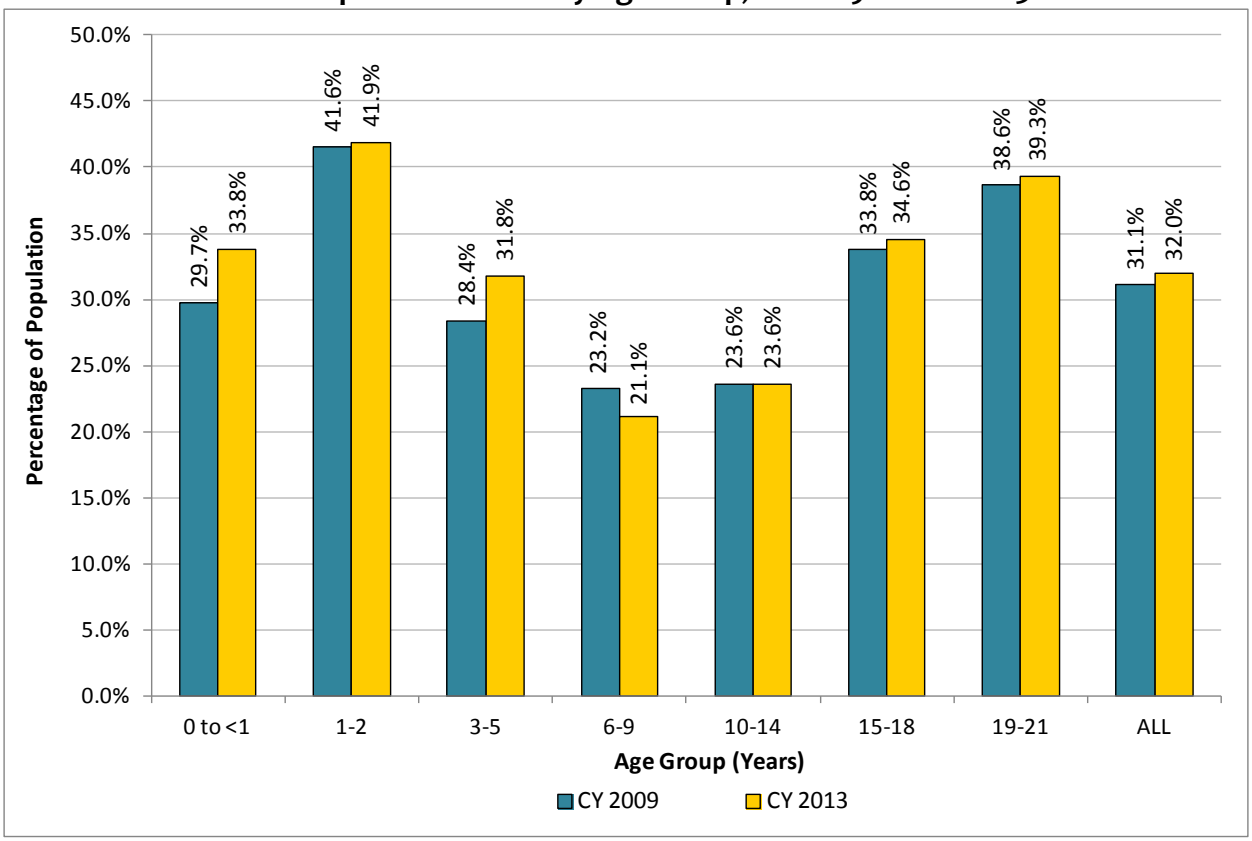


Figure 12 displays the percentage of children in foster care receiving at least one MCO outpatient ED visit[17] in CY 2009 and CY 2013 by age group. The overall rate increased by 0.9 percentage point during the evaluation period. Children aged 1 to 2 years and 19 to 21 years had the highest rates of ED utilization in CY 2013. Older children experienced an increase in ED utilization during the evaluation period.

Figure 12. Percentage of HealthChoice Children in Foster Care Receiving at Least One MCO Outpatient ED Visit by Age Group, CY 2009 and CY 2013



[17] MCO outpatient ED visits include ED visits that were seen and discharged on an outpatient basis. This measure does not include ED visits that lead to an inpatient admission or those paid through the FFS system.

Figure 13 compares the MCO outpatient ED visit rate in CY 2013 for children in foster care with the rate for other children enrolled in HealthChoice. Overall, children in foster care accessed the ED at a higher rate compared with other children in the HealthChoice program. Among 15 to 18 year-olds and 19 to 21 year-olds, children in foster care had ED utilization rates that were 8.7 and 7.1 percentage points higher, respectively. However, foster care children aged 1 to 2 years and 6 to 9 years all had lower ED utilization than other HealthChoice children in the same age groups.

Figure 13. Percentage of HealthChoice Children in Foster Care vs. Other HealthChoice Children Receiving at Least One MCO Outpatient ED Visit by Age Group, CY 2013

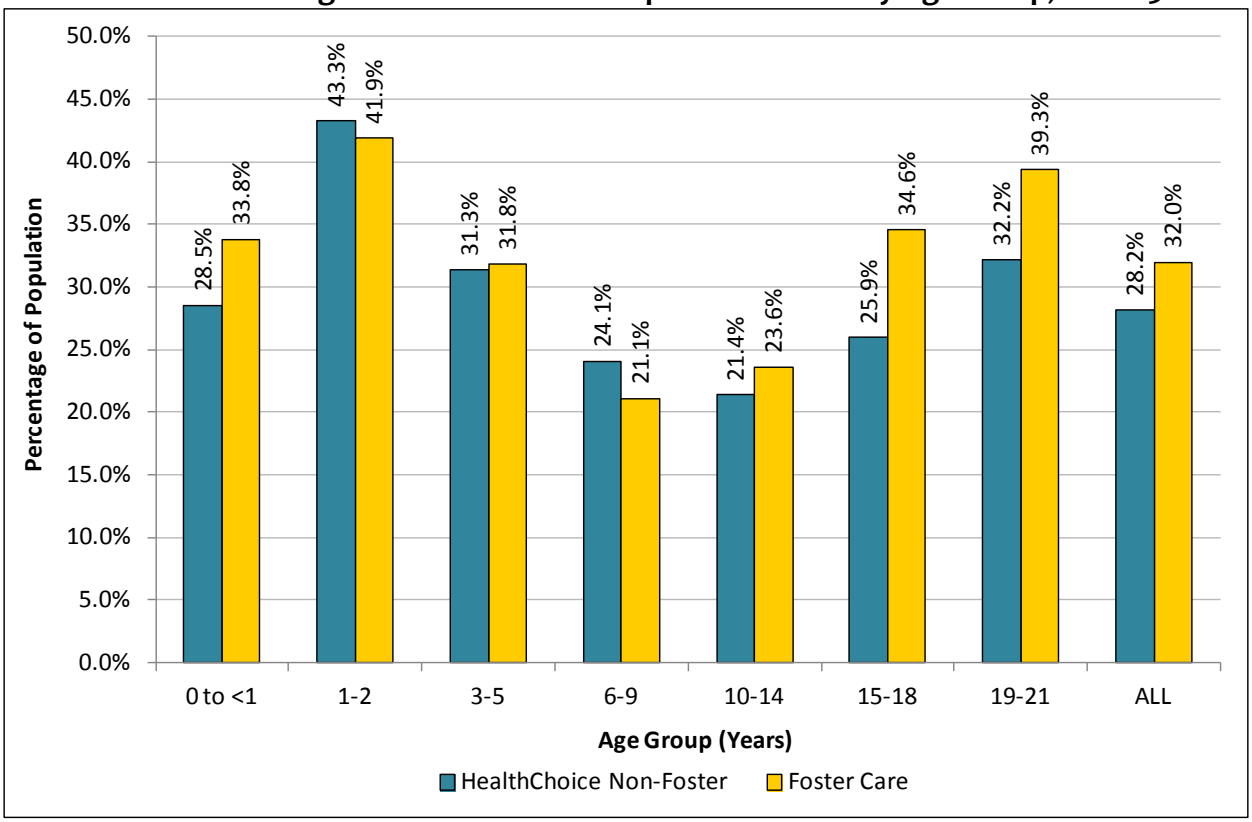
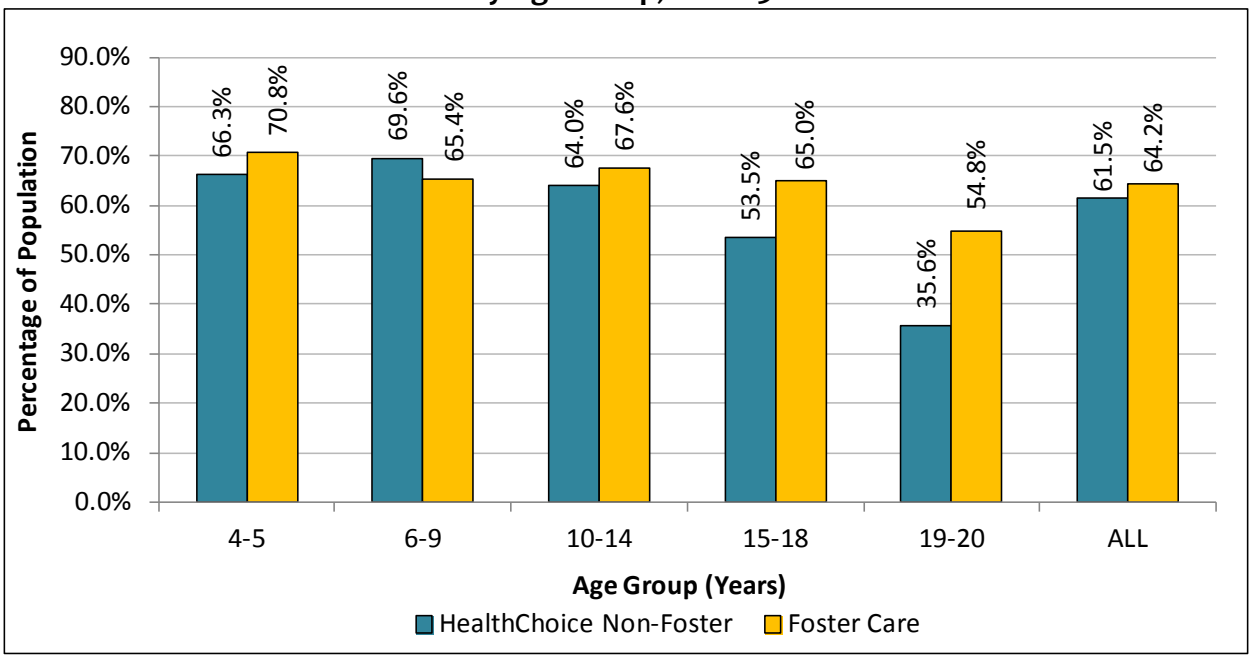


Figure 14 compares the dental utilization rate for children in foster care aged 4 to 20 years in HealthChoice with the rate for other children in HealthChoice in CY 2013. Overall, children in foster care had a higher dental visit rate (64.2 percent) than other HealthChoice children (61.5 percent). The largest differences between the two populations were observed in the older age groups. The dental visit rate for children in foster care aged 15 to 18 years was 65.0 percent, and it was 53.5 percent for non-foster children—a difference of 11.5 percentage points. For the 19 to 20 year-old age group, children in foster care had a dental visit rate that was 19.2 percentage points higher than other HealthChoice children.

Figure 14. Percentage of HealthChoice Children Aged 4-20 Years (Any Period of Enrollment) in Foster Care vs. Other HealthChoice Children Receiving at Least One Dental Visit, by Age Group, CY 2013



Reproductive Health

This section of the report focuses on the reproductive health services provided under HealthChoice. HEDIS prenatal measures are presented first, followed by a discussion of the Family Planning Program.

Timeliness of Prenatal Care

HEDIS measures the timeliness of prenatal care and the frequency of ongoing prenatal care to determine the adequacy of care for pregnant women. The earlier a woman receives prenatal care, the more likely the health conditions that would affect the health of hers and/or the newborn will be identified and managed.

Timeliness of prenatal care 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. Table 26 presents HealthChoice performance on this measure for CY 2009 though CY 2013 (HealthcareData Company, LLC, 2014). Timeliness of prenatal care decreased by 6 percentage points during the evaluation period, from 87.5 percent in CY 2009 to 81.5 percent in CY 2013. For the first four years of the evaluation period, HealthChoice outperformed the national HEDIS mean, but in CY 2013, the HealthChoice rate dropped below the national rate. The decline in HealthChoice performance in CY 2013 may be explained in part by the inclusion of a new HealthChoice MCO, into the average rate calculation. The new MCO had a lower rate on this measure, with a score of 52.2 percent, while the other MCOs scored between 84.2 and 90.0 percent.

Table 26. HEDIS Timeliness of Prenatal Care, HealthChoice Maryland Compared with the National HEDIS Mean, CY 2009 – CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Percentage of Deliveries in which the Mother Received a Prenatal Care Visit in the 1st Trimester or within 42 days of HealthChoice Enrollment	87.5%	86.9%	86.3%	85.8%	81.5%
National HEDIS Mean	+	+	+	+	-

Frequency of Ongoing Prenatal Care

The frequency of ongoing prenatal care measure assesses the percentage of recommended[18] prenatal visits received. DHMH uses this measure to assess MCO performance in providing appropriate prenatal care. The measure calculates the percentage of deliveries that received the expected number of prenatal visits. This measure accounts for gestational age and time of enrollment, and women must be continuously enrolled 43 days prior to and 56 days after delivery.

The first aspect of this measure assesses the percentage of women who received more than 80 percent of expected visits; therefore, a higher score is preferable. Table 27 shows that this rate decreased by 8.8 percentage points during the evaluation period, from 74.8 percent in CY 2009 to 66.0 percent in CY 2013 (HealthcareData Company, LLC, 2014). The second aspect of this measure assesses the percentage of women who received less than 21 percent of expected visits; therefore, a lower score is preferable. The rate for this measure increased by 4.5 percentage points from 5.2 percent in CY 2009 to 9.7 percent in CY 2013. In sum, Maryland consistently

[18] The American College of Obstetricians and Gynecologists recommends a visit once every 4 weeks during the first 28 weeks of pregnancy, once every 2 to 3 weeks during the next 7 weeks, and weekly for the remainder of the pregnancy, for a total of about 13 to 15 visits.

outperformed the national HEDIS means for both aspects of this measure, although performance over the evaluation period declined. The decline in CY 2013 performance may be explained by the inclusion of a new MCO into the average rate calculation. For the first aspect of the measure, the new MCO scored 21.7 percent, while the other MCOs scored between 70.6 and 78.8 percent. For the second part of the measure, the new MCO scored 37.0 percent, while the other MCOs had rates between 2.2 and 8.2 percent.

Table 27. 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 2009–CY 2013

	CY 2009		CY 2010		CY 2011		CY 2012		CY 2013	
	MD	National	MD	National	MD	National	MD	National	MD	National
Greater than or equal to 81% of Expected Prenatal Visits	74.8%	+	74.2%	+	74.4%	+	71.5%	+	66.0%	+
Less than 21% of Expected Prenatal Visits*	5.2%	+	3.7%	+	4.9%	+	6.3%	+	9.7%	+

*A lower rate points to better performance. A "+" means that the rate is below the National HEDIS Mean.

The Family Planning Program

The Family Planning Program provides family planning office visits to women who are not eligible for Medicaid. These services include physical examinations, certain laboratory services, family planning supplies, reproductive education, counseling and referral, and permanent sterilization services. Previously, the Family Planning Program only enrolled postpartum women. Eligibility for the program, however, was expanded in 2012 to cover women younger than 51 years of age with household income below 200 percent of the FPL.

Tables 28 and 29 present the percentage of total Medicaid participants in the Family Planning Program and the percentage of Family Planning participants who received at least one service between CY 2009 and CY 2013. These data are presented for women who were enrolled in Family Planning for any period of time during the calendar year and women who were enrolled continuously for 12 months.

The number of women with any period of enrollment in the Family Planning Program decreased by 31.5 percent between CY 2009 and CY 2013 (Table 28). This decline in enrollment may be attributed to several significant changes made in CY 2008 in response to new CMS terms and conditions. CMS required the program to perform annual active redeterminations in order to reduce the upper income limit from 250 to 200 percent of the FPL and to no longer enroll women with other third-party insurance that includes family planning benefits. The July 2008 Medicaid expansion also increased the number of women who are eligible for full Medicaid coverage after

delivery, thus decreasing the number of women enrolled in the limited benefit Family Planning Program.

Table 28 shows that, during the evaluation period, the percentage of women with any period of enrollment in the program who utilized at least one family planning service ranged between 43.3 percent and 52.0 percent. As Table 29 displays, the percentage of women enrolled in the program for the entire 12 months with at least one service increased from 34.3 percent in CY 2009 to 54.3 percent in CY 2013.

Table 28. Percentage of Family Planning Participants (Any Period of Enrollment) with at Least One Corresponding Service, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Number of Participants	38,127	25,912	21,058	24,885	26,114
Number with at least 1 Service	16,508	11,427	9,488	12,939	12,874
Percentage with at least 1 Service	43.3%	44.1%	45.1%	52.0%	49.3%

Table 29. Percentage of Family Planning Participants (12-Month Enrollment) with at Least One Corresponding Service, CY 2009–CY 2013

	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Number of Participants	7,432	1,886	1,736	2,521	4,148
Number with at least 1 Service	2,551	1,047	930	1,352	2,252
Percentage with at least 1 Service	34.3%	55.5%	53.6%	53.6%	54.3%

Services for Individuals with HIV/AIDS

DHMH 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.

Table 30 presents the percentage of participants with HIV/AIDS by age group and race/ethnicity for CY 2009 and CY 2013. Across the evaluation period, the distribution of enrollees by age group has remained consistent. Black and White participants composed approximately 95 percent of the HIV/AIDS population. The Black-to-White participant ratio was approximately 9 to 1 in CY 2013.

Table 30. Distribution of HealthChoice Participants (Any Period of Enrollment) with HIV/AIDS by Age Group and Race/Ethnicity, CY 2009 and CY 2013

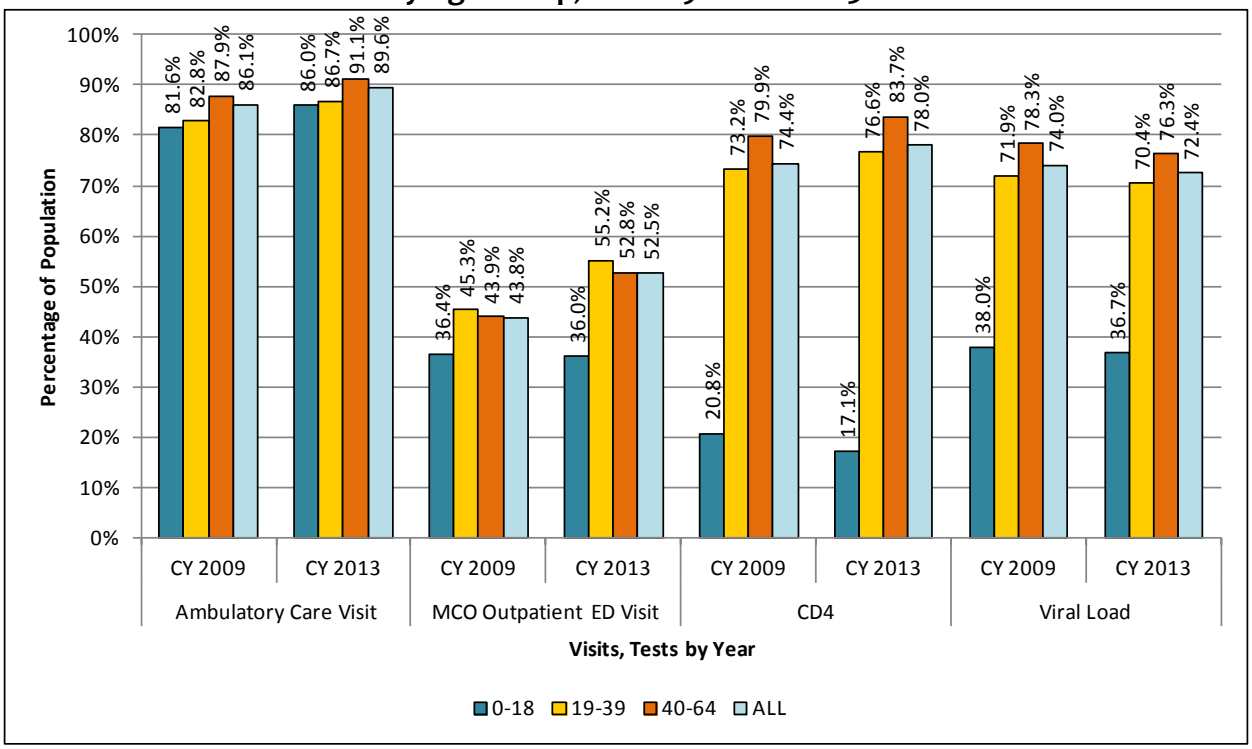
	CY 2009		CY 2013	
Age Group (Years)	**Number of Participants**	**Percentage of Total**	**Number of Participants**	**Percentage of Total**
0-18	332	6.1%	286	5.6%
19-39	1,511	27.9%	1,424	28.0%
40-64	3,574	66.0%	3,377	66.4%
Total	**5,417**	**100.0%**	**5,087**	**100.0%**
Race/Ethnicity	**Number of Participants**	**Percentage of Total**	**Number of Participants**	**Percentage of Total**
Asian	15	0.3%	18	0.4%
Black	4,610	85.1%	4,338	85.3%
White	563	10.4%	484	9.5%
Hispanic	44	0.8%	52	1.0%
Other	185	3.4%	195	3.8%
Total	**5,417**	**100.0%**	**5,087**	**100.0%**

Figure 15 shows service utilization by participants with HIV/AIDS in CY 2009 and CY 2013 by age group. Overall, the percentage of participants who received an ambulatory care visit increased by 3.5 percentage points between CY 2009 and CY 2013. This rate increased for all age groups. However, the overall percentage of participants with an MCO outpatient ED visit also increased by nearly 9 percentage points during the evaluation period. This rate increased for all age groups, with the exception of children aged 0 to 18 years.

Figure 15 also presents the percentage of individuals with HIV/AIDS who received CD4 testing in CY 2009 and CY 2013. The overall rate increased by 3.6 percentage points. The testing rate for individuals aged 0 to 18 years decreased by 3.7 percentage points between CY 2009 and CY 2013, while the testing rate for the other age groups increased.

Finally, Figure 15 presents the percentage of individuals with HIV/AIDS who received viral load testing during the evaluation period. This measure dropped from 74.0 percent in CY 2009 to 72.4 percent in CY 2013. Individuals aged 40 through 64 years showed the largest decrease in utilization, with a decrease of 2.0 percentage points.

Figure 15. Percentage of HealthChoice Participants with HIV/AIDS who Received an Ambulatory Care Visit, MCO Outpatient ED Visit, CD4 Testing, and Viral Load Testing by Age Group, CY 2009 and CY 2013



REM Program

The REM program provides case management services to Medicaid participants who have one of a specified list of rare and expensive medical conditions and require sub-specialty care. To be enrolled in REM, 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 HIV/AIDS, 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 aide, and adult dental services. This section of the report presents data on REM enrollment and service utilization.

REM Enrollment

Table 31 presents REM enrollment by age group and sex for CY 2009 and CY 2013. In both years, the majority of REM participants were male children aged 0 through 18 years. The gender distribution differs from the general HealthChoice population, which has a higher percentage of females (approximately 56.8 percent in CY 2013).

Table 31. REM Enrollment by Age Group and Sex, CY 2009 and CY 2013

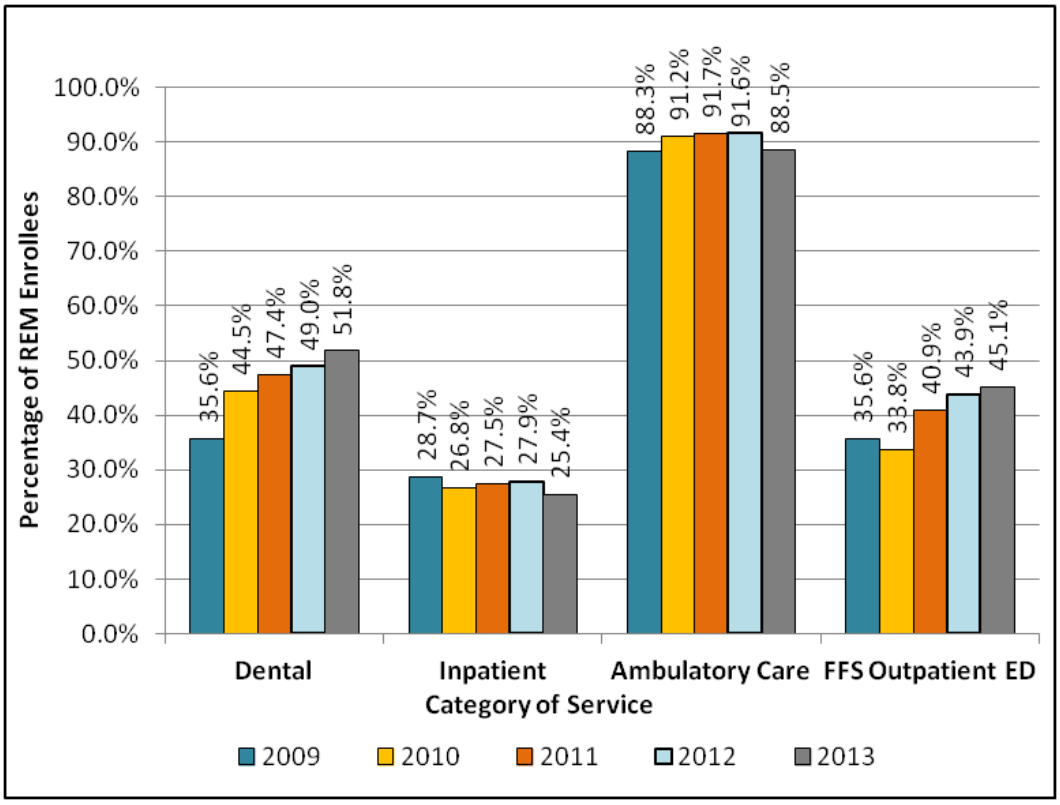
	CY 2009		CY 2013	
Age Group (Years)	**Number of Enrollees**	**Percent of Total**	**Number of Enrollees**	**Percent of Total**
0-18	3,066	73.1%	3,258	69.0%
18 and over	1,130	26.9%	1,463	31.0%
Total	**4,196**	**100%**	**4,721**	**100%**
Sex	**Number of Enrollees**	**Percent of Total**	**Number of Enrollees**	**Percent of Total**
Female	1,855	44.2%	2,089	44.2%
Male	2,341	55.8%	2,632	55.8%
Total	**4,196**	**100%**	**4,721**	**100%**

REM Service Utilization

Figure 16 presents the percentage of REM participants who received at least one dental, inpatient, ambulatory care, and FFS outpatient ED visit between CY 2009 and CY 2013.[19] The dental, inpatient, and ambulatory care visit measures serve as indicators of access to care. The percentage of participants with a dental visit increased markedly during the evaluation period, from 35.6 percent in CY 2009 to 51.8 percent in CY 2013. The ambulatory care utilization rate increased by 0.2 percentage point during the evaluation period, and inpatient service utilization declined by 3.3 percentage points. The percentage of participants who had a FFS outpatient ED visit increased 9.5 percentage points between CY 2009 and CY 2013.

[19] The analysis includes participants who were in the REM program for any period during the calendar year and received FFS dental, inpatient, ambulatory care, and outpatient ED services. Inpatient service includes services performed in acute, chronic, hospice, and rehabilitation facilities.

Figure 16. Percentage of REM Participants (Any Period of Enrollment) with at Least One Dental, Inpatient, Ambulatory Care, and FFS Outpatient ED Visit, CY 2009–CY 2013



Racial/Ethnic Disparities

Racial/ethnic disparities in health care are nationally recognized challenges. DHMH is committed to improving health services utilization among racial/ethnic groups through its managing-for-results program. This section of the report presents enrollment trends among racial/ethnic groups and assesses disparities within several measures of service utilization.

Enrollment

Table 32 displays HealthChoice enrollment by race/ethnicity. Total enrollment increased within each racial/ethnic group between CY 2009 and CY 2013. However, this growth did not occur uniformly across all categories. Enrollment of Asian and Black participants increased by 68.8 percent and 22 percent, respectively. Participants in the Other racial/ethnic category experienced the greatest growth, with enrollment increasing by approximately 75.6 percent. In terms of the racial composition within HealthChoice, the percentage of Black participants decreased from 51.3 percent in CY 2009 to 48.4 percent in CY 2013, whereas the percentage of Hispanic participants increased by less than one percentage point.

Table 32. HealthChoice Enrollment by Race/Ethnicity, CY 2009 and CY 2013

	CY 2009		CY 2013	
Race/Ethnicity	**Number of Enrollees**	**Percent of Total Race/Ethnicity**	**Number of Enrollees**	**Percent of Total Race/Ethnicity**
Asian	20,283	2.7%	34,230	3.6%
Black	381,140	51.3%	465,070	48.4%
White	215,752	29.0%	273,673	28.5%
Hispanic	87,267	11.7%	120,734	12.6%
Other	38,656	5.2%	67,890	7.1%
Total	**743,098**	**100%**	**961,597**	**100%**

Ambulatory Care Visits

Figure 17 shows the percentage of children aged 0 through 20 years who received at least one ambulatory care visit in CY 2009 and CY 2013 by race/ethnicity. This rate increased for most racial/ethnic groups during the evaluation period. Hispanic participants had the highest rate in both CY 2009 (87.3 percent) and CY 2013 (89.0 percent), and Black participants had the lowest rate across the evaluation period. The rate for Asian participants decreased slightly across the evaluation period, from 82.5 percent in CY 2009 to 82.0 percent in CY 2013.

Figure 17. Percentage of HealthChoice Participants Aged 0–20 Years Receiving an Ambulatory Care Visit by Race/Ethnicity, CY 2009 and CY 2013

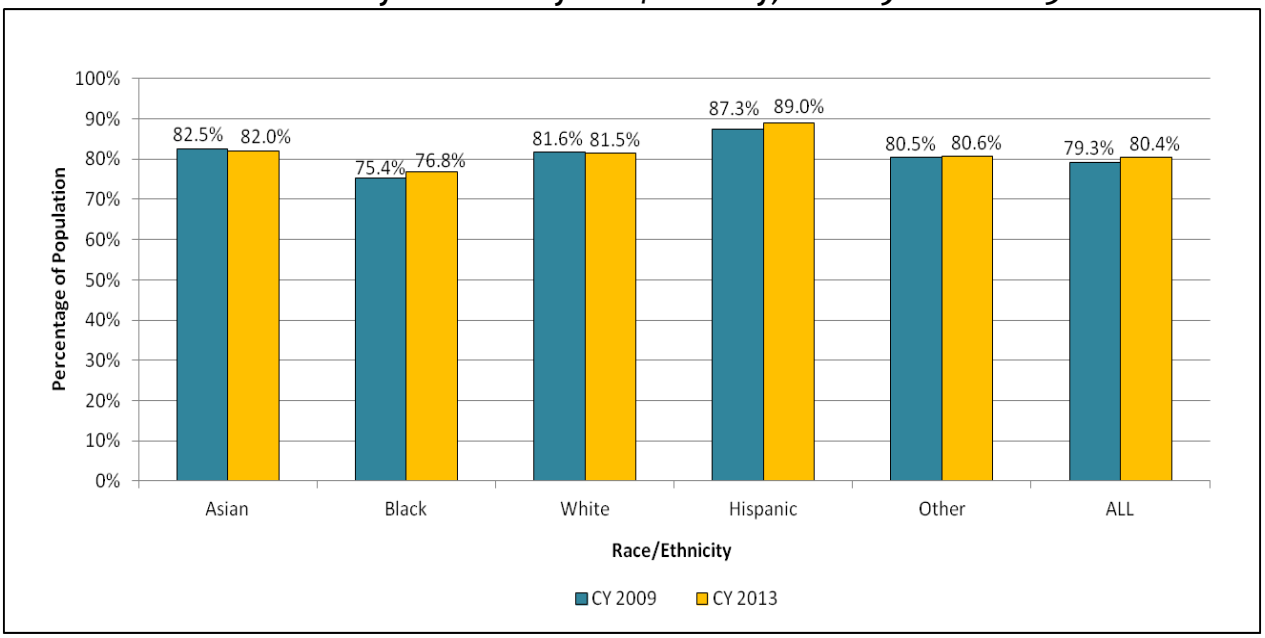
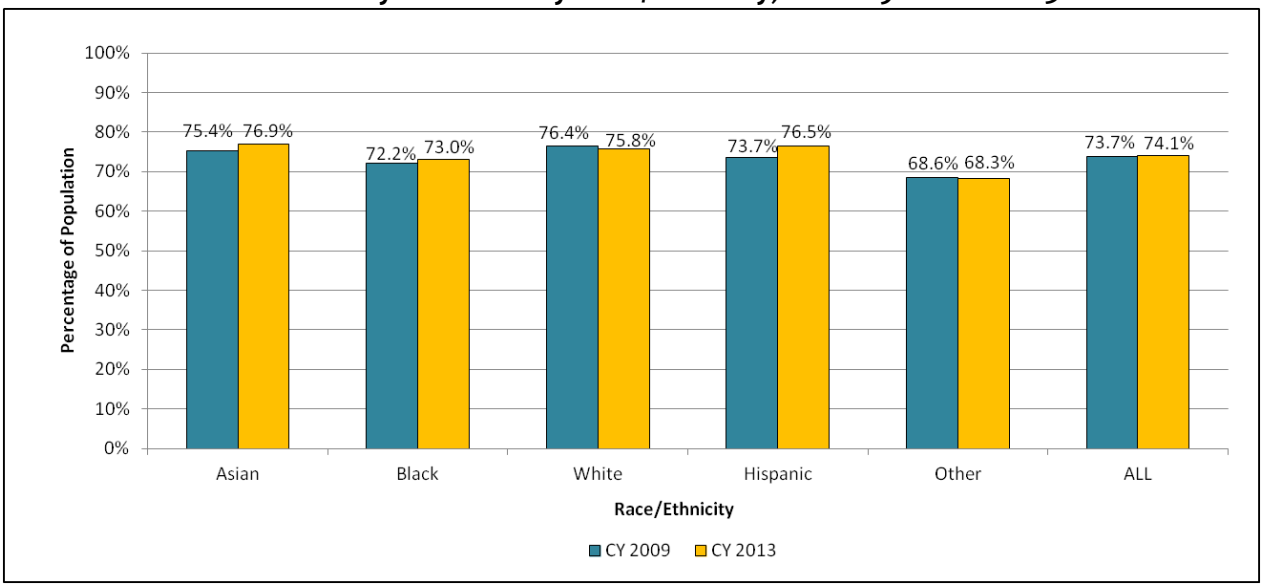


Figure 18 presents the percentage of adults aged 21 through 64 years who received at least one ambulatory care visit in CY 2009 and CY 2013 by race/ethnicity. The White and Other racial/ethnic categories experienced decreases during the evaluation period. Hispanic participants experienced the greatest increase during the evaluation period (2.8 percentage points), followed by Asian participants (1.5 percentage points), and Black participants (0.8 percentage point).

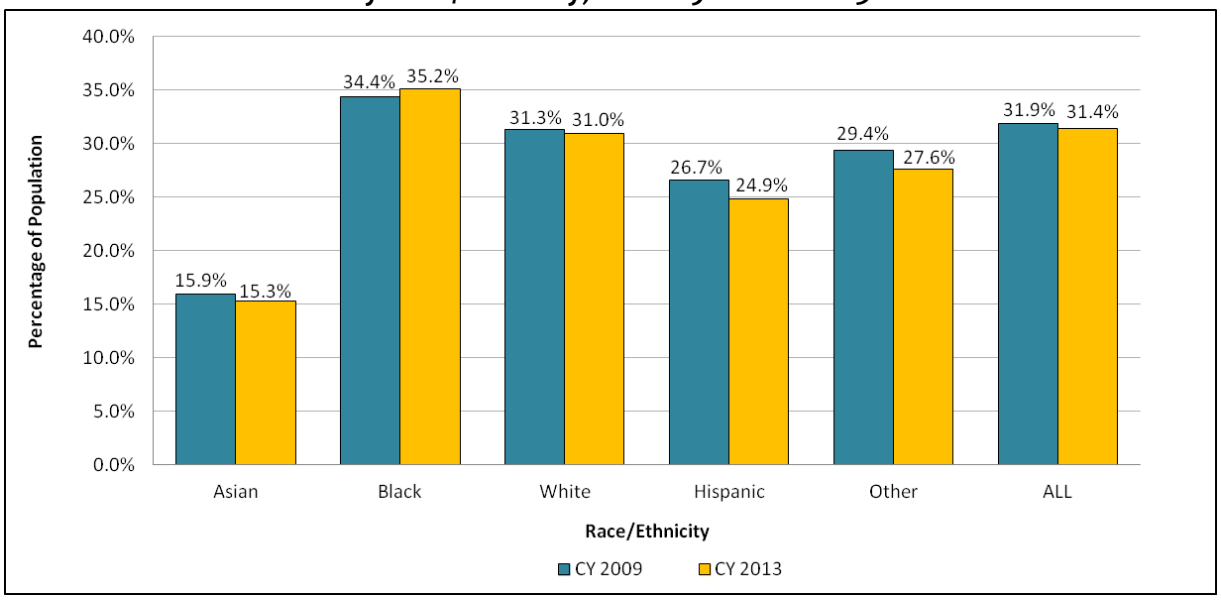
Figure 18. Percentage of HealthChoice Participants Aged 21–64 Years Receiving an Ambulatory Care Visit by Race/Ethnicity, CY 2009 and CY 2013



ED Visits

Figure 19 displays the percentage of HealthChoice participants aged 0 through 64 years who had at least one ED visit by race/ethnicity in CY 2009 and CY 2013. Black participants had the highest ED visit rate and had a slight increase during the evaluation period, from 34.4 percent in CY 2009 to 35.2 percent in CY 2013. All other racial/ethnic categories had a decrease during the evaluation period. Asian participants had the lowest rate across the evaluation period.

Figure 19. Percentage of HealthChoice Participants Aged 0–64 Receiving an ED Visit by Race/Ethnicity, CY 2009 and CY 2013



Section IV Summary

This section of the report provided an overview of several special HealthChoice initiatives and programs. Some of the highlights include:

- Dental services for children, pregnant women, and adults in the REM program were carved out of the MCO benefit package on July 1, 2009. These services are administered by an ASO. Maryland has made improvements in children's dental service utilization and dental provider reimbursement.
- The percentage of participants with an MHD ranged between 21.3 and 23.0 percent between CY 2009 and CY 2013. The percentage of participants with an SUD ranged between 4.1 and 4.6 percent during the same time period. HealthChoice participants with an SUD had higher rates of ED visits for somatic care than the population with an MHD, while those with an MHD had higher rates of physician visits for somatic care.

- In CY 2013, children in foster care had a lower rate of ambulatory care service utilization and a slightly higher rate of MCO outpatient ED visits compared with other children in HealthChoice.
- Measures of access to prenatal care services declined slightly during the evaluation period, but Maryland outperformed the national HEDIS means in CY 2013.
- Enrollment in the Family Planning Program decreased by 31.5 percent between CY 2009 and CY 2013 (using the any period of enrollment methodology).
- Ambulatory care service utilization and CD4 testing rates improved for participants with HIV/AIDS during the evaluation period, while the viral load testing rate dropped. ED utilization by this population also increased during the evaluation period.
- The REM program provides case management, medically necessary private duty nursing, and other expanded benefits to participants who have one of a specified list of rare and expensive medical conditions. In CY 2013, the majority of REM participants were children (69 percent) and male (nearly 56 percent).
- Regarding racial/ethnic disparities in access to care, Black children continue to have lower rates of ambulatory care visits than other children. Among the entire HealthChoice population, Blacks also have the highest ED utilization rates. DHMH will continue to monitor these measures to reduce disparities between racial/ethnic groups.

Section V. PAC Access and Quality

Implemented in July 2006, the PAC program offered limited benefits to childless adults aged 19 years and older who were not eligible for Medicare or Medicaid and whose incomes were at or below 116 percent of the FPL. The PAC program replaced the Maryland Pharmacy Assistance and Maryland Primary Care programs. Participants chose from one of five PAC MCOs and a participating PCP. Each MCO in the PAC program offered the following services:

- Primary care services, including visits to a physician or clinic
- Family planning services
- Routine annual gynecological visits
- Prescriptions
- Certain over-the-counter medications with a physician's order
- Some x-ray and laboratory services
- Diabetes-related services, including vision care and podiatry
- Mental health services provided by an enrollee's PCP
- Community-based substance abuse services (effective January 1, 2010)
- Outpatient ED facility services (effective January 1, 2010)

Additionally, participants were able to receive specialty mental health services through the FFS system.

As a result of the Medicaid expansion option in the ACA, the PAC program transitioned into a categorically-eligible Medicaid population on January 1, 2014 (after this report's evaluation period). Childless adults under the age of 65 years and with incomes up to 138 percent of the FPL now receive full Medicaid benefits, and services are provided through HealthChoice MCOs.

This section of the report analyzes a variety of PAC enrollment and service utilization performance measures.

PAC Enrollment

This section presents PAC enrollment from CY 2009 through CY 2013. The number of participants with any period of enrollment in PAC increased by 129 percent during the evaluation period, from 48,636 participants in CY 2009 to 111,519 participants in CY 2013.

Figure 20 presents the percentage of PAC participants with any period of enrollment by race/ethnicity for CY 2009 through CY 2013. Across the evaluation period, Black participants and White participants comprised roughly 94 percent of the PAC population, with the Black-to-

White ratio almost 2 to 1 in the initial year of the evaluation period. However, since CY 2009, this ratio decreased.

Figure 20. PAC Enrollment (Any Period of Enrollment) by Race/Ethnicity, CY 2009–CY 2013

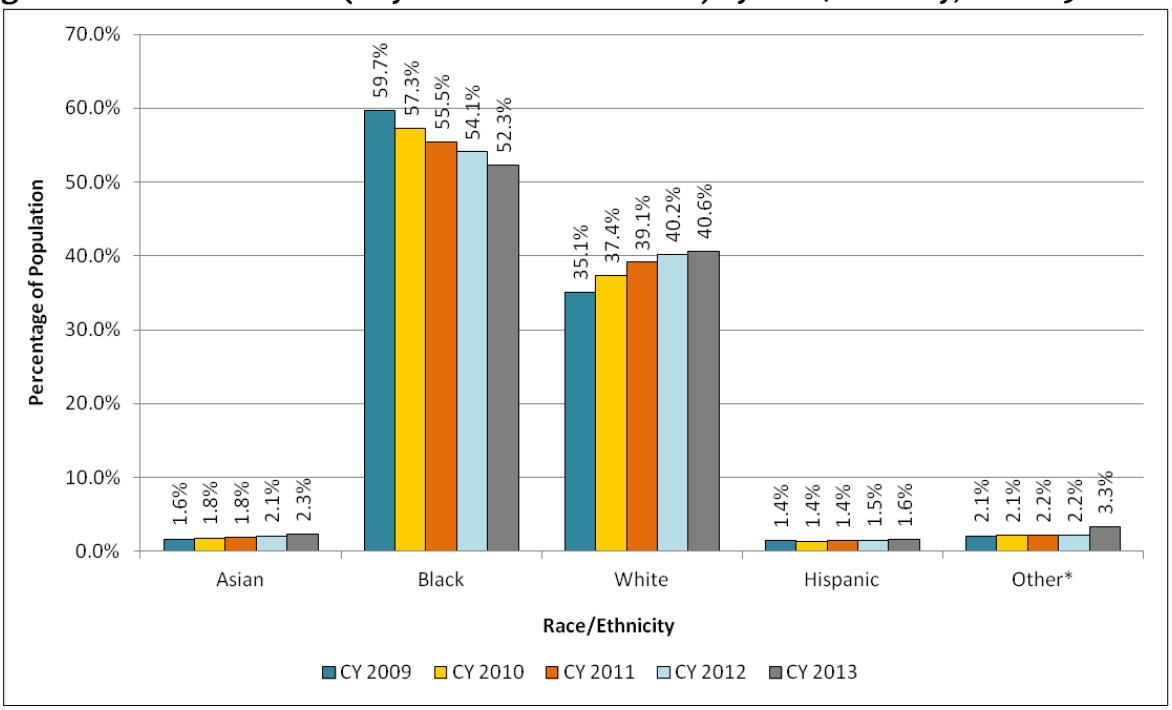
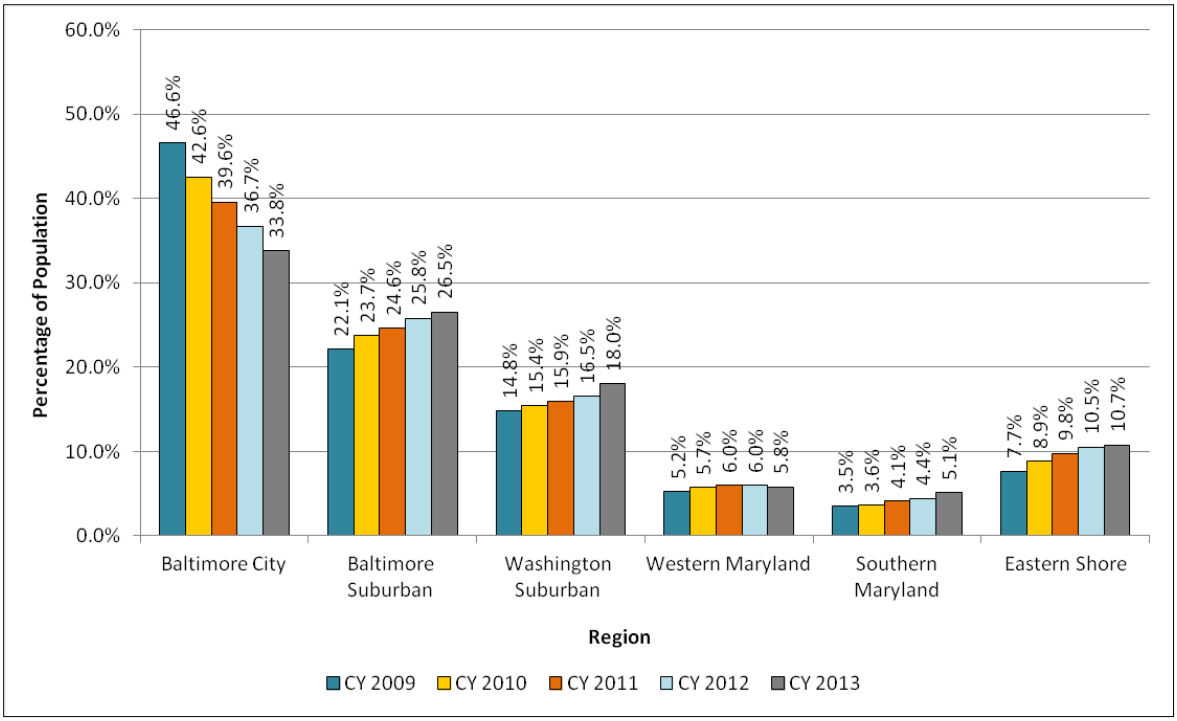


Figure 21 presents PAC enrollment by region from CY 2009 through CY 2013. Enrollment was concentrated in the densely populated areas of the State, with at least 78 percent of participants residing in three regions across the evaluation period: Baltimore City, Baltimore Suburban, and Washington Suburban.

Figure 21. PAC Enrollment (Any Period of Enrollment) by Region, CY 2009–CY 2013



PAC Service Utilization

To provide a more accurate review of PAC enrollee service utilization, this section of the report includes only individuals who were enrolled in the PAC program for the entire year, with the exception of the MHD and SUD services sections.

Ambulatory Care Visits

Figure 22 presents the percentage of PAC participants who had at least one ambulatory care visit between CY 2009 and CY 2013 by race/ethnicity. The percentage of participants with an ambulatory care visit fluctuated across the evaluation period. The overall increase was 0.5 percentage points, from 72.4 percent in CY 2009 to 72.9 percent in CY 2013. Hispanic participants experienced the greatest increase (8.7 percentage points), followed by the Asian and Other categories, with increases of approximately 6.4 and 4.3 percentage points, respectively. White participants experienced a decrease, from 73.1 percent in CY 2009 to 70.5 percent in CY 2013.

Figure 22. Percentage of PAC Participants (12 Months of PAC Enrollment) who Received an Ambulatory Care Visit by Race/ Ethnicity, CY 2009–CY 2013

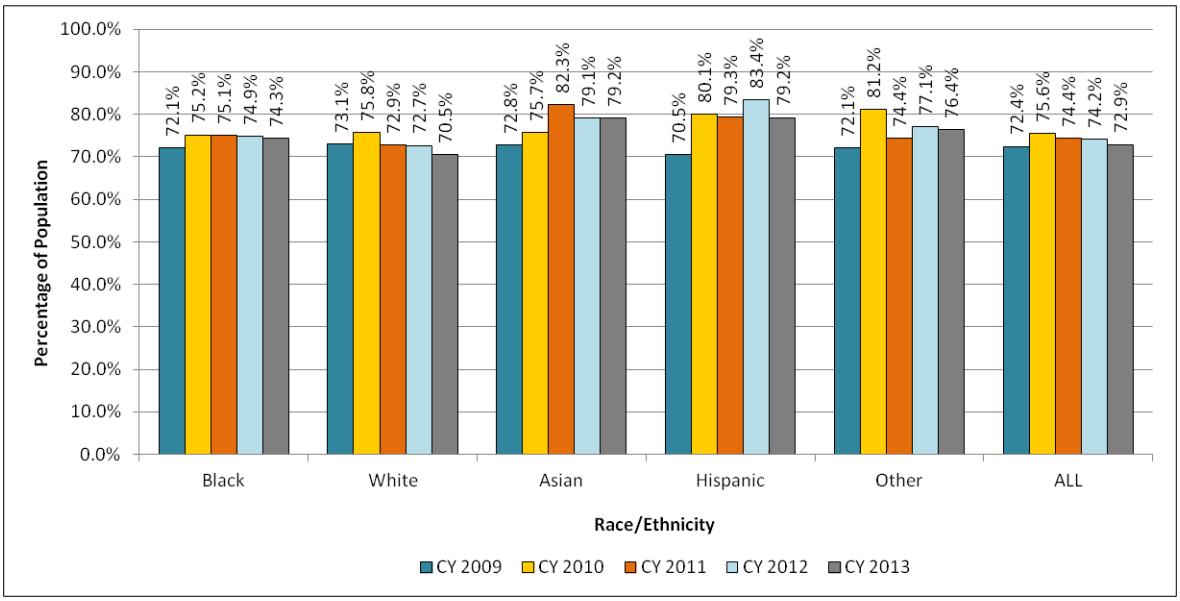
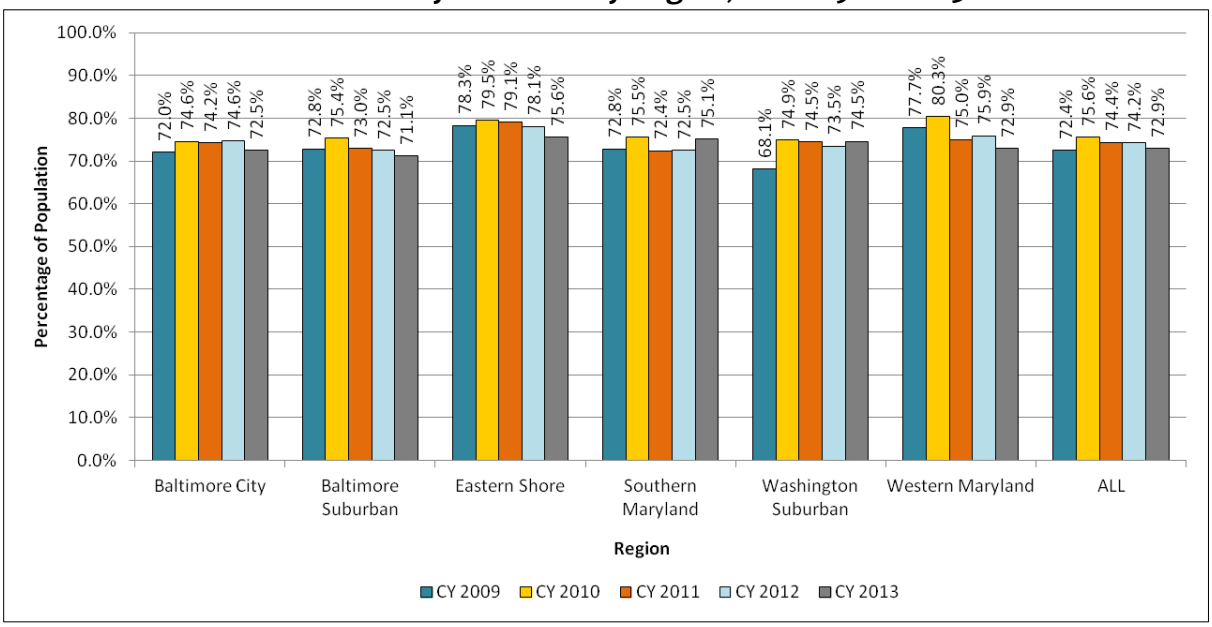


Figure 23 shows that the ambulatory care visit rate increased within half of the regions. The Washington Suburban and Southern Maryland regions experienced the greatest increase (6.4 and 2.3 percentage points, respectively). The Western Maryland region experienced the largest decrease in the ambulatory care visit rate across the evaluation period (4.8 percentage points).

Figure 23. Percentage of PAC Participants (12 Months of PAC Enrollment) who Received an Ambulatory Care Visit by Region, CY 2009–CY 2013



Mental Health Services

Similar to full-benefit HealthChoice participants, mental health services for PAC beneficiaries were carved out and managed by an ASO. Table 33 shows the regional distribution of PAC participants with an MHD between CY 2009 and CY 2013. The percentage of PAC participants with an MHD residing in Baltimore City decreased by 10.5 percentage points over the evaluation period, while all other Maryland regions experienced increases.

Table 33. Regional Distribution of PAC Population (Any Period of Enrollment) with an MHD, CY 2009 – CY 2013

Region	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Baltimore City	43.8%	39.5%	37.6%	35.6%	33.3%
Baltimore Suburban	25.8%	27.3%	27.5%	27.7%	28.3%
Eastern Shore	8.6%	10.0%	10.9%	11.5%	11.4%
Southern Maryland	3.6%	3.7%	3.9%	4.3%	5.2%
Washington Suburban	12.2%	12.5%	12.9%	13.3%	14.4%
Western Maryland	6.0%	7.0%	7.1%	7.6%	7.4%
Total	**100%**	**100%**	**100%**	**100%**	**100%**
Number of Enrollees	**13,592**	**18,941**	**25,029**	**29,541**	**34,437**

Table 34 shows the percentage of PAC participants with an MHD who visited a physician and/or an ED for somatic care. The percentage of participants with at least one physician visit increased by 3.5 percentage points over the evaluation period. The percentage of participants with an ED visit increased by 9.0 percentage points, from 35.4 percent in CY 2010 to 44.4 percent in CY 2013.

Table 34. Service Utilization among PAC Participants (Any Period of Enrollment) with an MHD, CY 2009–CY 2013

Year	Number of PAC Participants with an MHD	Percentage with a Physician Visit for Somatic Care	Percentage with an ED Visit for Somatic Care
CY 2009	13,775	67.3%	*
CY 2010	19,102	69.7%	35.4%
CY 2011	25,224	69.4%	41.2%
CY 2012	29,593	69.1%	42.8%
CY 2013	34,437	70.8%	44.4%

*The PAC program began to offer outpatient ED facility services on January 1, 2010.

Substance Use Disorder Services

Table 35 shows the regional distribution of PAC participants with an SUD between CY 2009 and CY 2013. Throughout the evaluation period, the largest percentage of PAC participants treated for an SUD lived in Baltimore City. However, the percentage in Baltimore City decreased over time and increased in the rest of the regions of Maryland.

Table 35. Regional Distribution of PAC Population (Any Period of Enrollment) with an SUD, CY 2009–CY 2013

Region	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Baltimore City	65.8%	52.3%	48.1%	45.5%	42.5%
Baltimore Suburban	18.6%	25.2%	26.0%	27.0%	27.9%
Eastern Shore	4.7%	7.5%	8.5%	9.6%	10.2%
Southern Maryland	1.5%	2.5%	3.3%	3.6%	4.5%
Washington Suburban	6.5%	7.1%	8.2%	8.5%	9.2%
Western Maryland	2.8%	5.5%	5.8%	5.6%	5.8%
Total	**100%**	**100%**	**100%**	**100.0%**	**100%**
Number of Enrollees	**5,473**	**15,065**	**19,942**	**23,244**	**26,620**

Table 36 shows the percentage of PAC participants with an SUD who visited a physician or ED for somatic care. The percentage of participants with at least one physician visit decreased from 73.6 percent in CY 2009 to 57.7 percent in CY 2013. The percentage of participants with an ED

visit increased from 39.4 percent in CY 2010 to 49.0 percent in CY 2013. The increases in both the number of participants with an SUD and the use of ED services for somatic care, along with the decrease in the percentage of PAC participants with an SUD who accessed somatic care through a physician visit, could be attributed to the addition of outpatient substance abuse services and coverage for ED facility charges to the PAC benefit in January 2010.

Table 36. Service Utilization among PAC Participants (Any Period of Enrollment) with an SUD, CY 2009–CY 2013

Year	Number of PAC Participants with an SUD	Percentage with a Physician Visit for Somatic Care	Percentage with an ED Visit for Somatic Care
CY 2009	5,473	73.6%	*
CY 2010	15,065	60.8%	39.4%
CY 2011	19,942	58.9%	44.4%
CY 2012	23,244	57.0%	47.2%
CY 2013	26,620	57.7%	49.0%

*The PAC program began to offer outpatient ED facility services on January 1, 2010.

Table 37 presents the number and percentage of PAC participants with an SUD and at least one methadone replacement therapy service. Between CY 2009 and CY 2013, the percentage of participants with at least one methadone replacement therapy increased from 4.8 percent to 33.2 percent. The substantial increase in methadone replacement therapy between CY 2009 and CY 2010 reflects the addition of outpatient substance abuse services to the PAC benefit in January 2010.

Table 37. Number and Percentage of PAC Participants (Any Period of Enrollment) with an SUD and at Least One Methadone Replacement Therapy, CY 2009 - CY 2013

Year	Total Enrollees with SUD	Number of Enrollees with SUD and Methadone Replacement Therapy	Percentage of Total Enrollees with SUD
CY 2009	5,473	261	4.8%
CY 2010	15,065	4,216	28.0%
CY 2011	19,942	6,048	30.3%
CY 2012	23,244	7,613	32.8%
CY 2013	26,620	8,847	33.2%

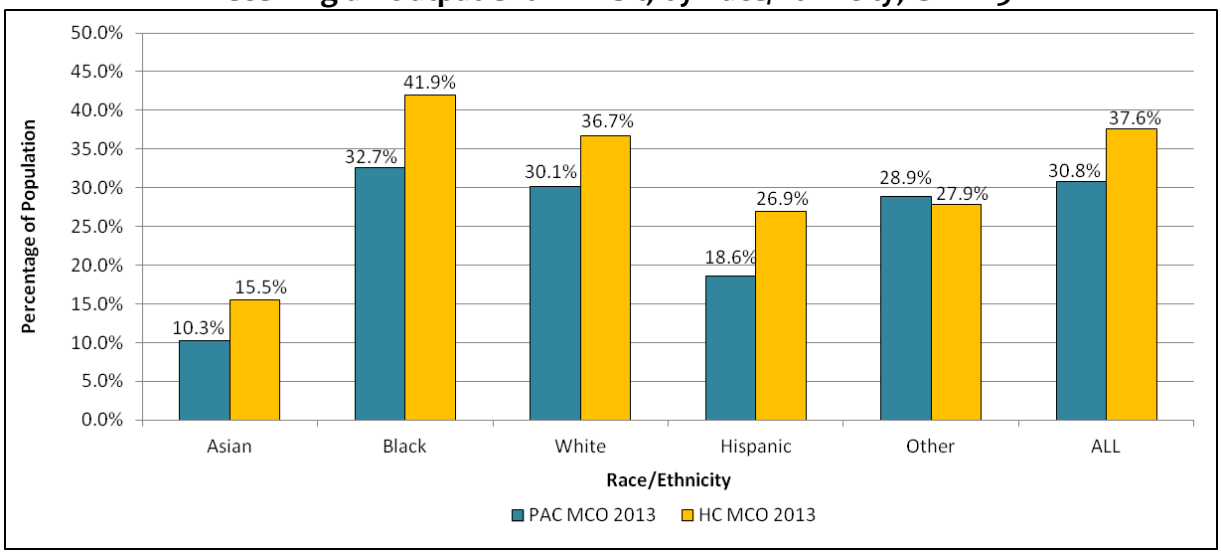
ED Visits

On January 1, 2010, Maryland added outpatient ED visits to the PAC benefit package. Figure 24 compares the percentage of PAC participants who had at least one outpatient ED visit with the

percentage of HealthChoice participants aged 19 to 64 years with an outpatient ED visit. These data are presented by race/ethnicity for CY 2013.

In CY 2013, outpatient ED utilization rates among HealthChoice participants were 6.8 percentage points higher than those for PAC participants. Among all racial/ethnic groups, Black participants had the highest rate of ED use in both the PAC and HealthChoice populations. Conversely, Asian participants had the lowest rates of ED use in both the PAC and HealthChoice populations.

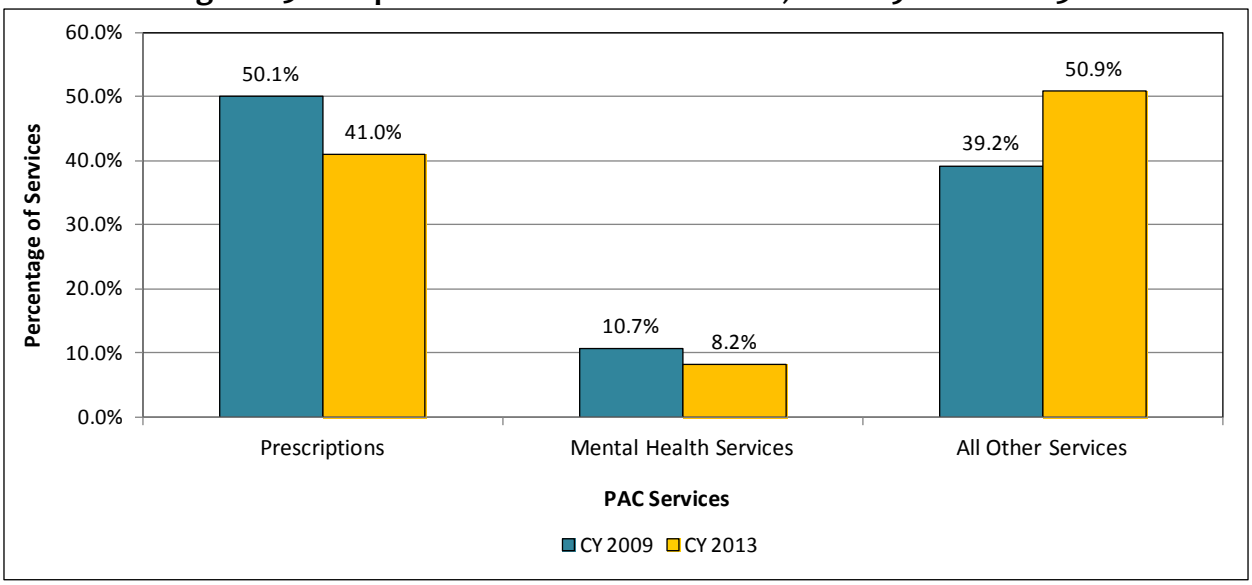
Figure 24. PAC Population vs. HealthChoice Population (Any Period of Enrollment) Receiving an Outpatient ED Visit, by Race/Ethnicity, CY 2013



Composition of Total PAC Services

Figure 25 presents the overall composition of services (categorized as prescriptions, mental health, and all other services) provided under the PAC program in CY 2009 and CY 2013. In CY 2009, prescriptions accounted for approximately one-half of all PAC services, whereas prescriptions accounted for 41 percent of services in CY 2013. Mental health visits accounted for 8.2 percent of services in CY 2013, a 2.5 percentage point decrease from CY 2009. The "all other services" category increased by 11.7 percentage points between CY 2009 and CY 2013. Please note that outpatient ED services and community-based substance abuse services were added to the PAC benefit midway through the evaluation period.

Figure 25. Composition of Total PAC Services, CY 2009 and CY 2013



PAC HEDIS Measures

DHMH began using HEDIS to assess quality and service utilization in the PAC program since CY 2008. The PAC HEDIS measures include breast cancer screening, cervical cancer screening, and comprehensive diabetes care. Table 38 reports the PAC HEDIS measures for CY 2009 through CY 2013 (HealthcareData Company, LLC, 2014).

The breast cancer screening measure assesses the percentage of women aged 40 through 69 years who received at least one mammogram for breast cancer screening within a two-year period. Fifty-one percent of women enrolled in PAC received a breast cancer screening in CY 2013, an increase of 12.6 percentage points from CY 2009.

The cervical cancer screening measure evaluates the percentage of women aged 21 through 64 years who received a Pap test within a three-year period. The cervical cancer screening rate decreased by 1.2 percentage points during the evaluation period, from 42.0 percent in CY 2009 to 40.8 percent in CY 2013.

The comprehensive diabetes care measures assess the percentage of participants with diabetes (types 1 and 2) who received HbA1c testing, eye exams, and LDL-C screening. In CY 2013, approximately 39 percent of PAC participants had eye exams. Over 81 percent of PAC participants received HbA1c testing, and nearly 76 percent received LDL-C screening. The HbA1c testing rates and LDL-C screening rates increased from CY 2009, while the eye exam rates decreased.

Table 38. PAC HEDIS Measures, CY 2009–CY 2013

HEDIS Measures	CY 2009	CY 2010	CY 2011	CY 2012	CY 2013
Breast Cancer Screening	38.4%	41.7%	40.8%	40.3%	51.0%
Cervical Cancer Screening	42.0%	42.7%	44.5%	42.8%	40.8%
Diabetes – HbA1c Testing	77.0%	76.7%	81.6%	79.9%	81.5%
Diabetes – Eye Exam	44.8%	40.5%	40.7%	37.6%	38.9%
Diabetes – LDL-C Screening	72.6%	72.8%	76.2%	74.5%	75.5%

Source: HealthcareData Company, LLC., September 2014

Section V Summary

PAC was a limited benefit program for adults with low income who were not eligible for Medicare or the full Medicaid benefit package. Overall, PAC enrollment increased 129 percent during the evaluation period.

DHMH measured PAC ambulatory care, MHD and SUD services, and prescription drug utilization between CY 2009 and CY 2013. During the evaluation period, the ambulatory care visit rate increased by 0.5 percentage points, while prescription utilization decreased by 9.1 percentage points. The percentage of PAC participants with an SUD and an ED visit for somatic care increased over the evaluation period, whereas the percentage with a physician visit decreased. Among those with an MHD, both rates of ED visits and physician visits increased during the evaluation period.

On January 1, 2010, Maryland added outpatient ED visits to the PAC benefit package. In CY 2013, 30.8 percent of PAC participants had at least one ED visit, compared with 37.6 percent of HealthChoice participants aged 19 to 64 years. DHMH began using PAC HEDIS measures in CY 2008. PAC performance for the breast cancer screening, HbA1c testing, and LDL-C screening measures improved during the evaluation period, while cervical cancer screening and eye exam measures declined. As a result of the Medicaid expansion option in the ACA, PAC participants transitioned into a categorically eligible Medicaid population on January 1, 2014. Childless adults under the age of 65 years and with incomes up to 138 percent of the FPL now receive full Medicaid benefits, and services are provided through HealthChoice MCOs.

Conclusion

HealthChoice is a mature managed care program that provided services to 14 percent of Marylanders, as of the end of CY 2013. The information presented in this evaluation provides strong evidence that HealthChoice has been successful in achieving its stated goals related to coverage and access to care, providing a medical home to participants, and improving the quality of care.

Some of the successes achieved during this evaluation period include increasing the rates of breast and cervical cancer screenings, childhood immunizations – combination 3, adolescent well-care visits, and HbA1c testing among participants with diabetes. Among individuals with HIV/AIDS, ambulatory care service utilization and CD4 testing rates increased. Rates of dental utilization also improved remarkably. The percentage of children receiving a dental visit increased by over 7 percentage points, and the percentage of REM participants receiving a dental visit rose by 16.2 percentage points. New developments will impact HealthChoice in the upcoming years, including the expansion of Medicaid coverage through the ACA, as well as the transition of PAC participants into full-benefit HealthChoice MCOs. These ongoing changes have resulted in a substantial increase in Medicaid enrollment. In addition, the State's chronic health home demonstration is currently underway. As of June 2015, DHMH approved 75 Health Home site applications. The Health Home sites include 60 psychiatric rehabilitation programs, 10 mobile treatment providers, and 5 opioid treatment programs. DHMH is also beginning to monitor colorectal cancer screening and HPV vaccination rates in the HealthChoice program; related outcomes will be included in upcoming HealthChoice evaluations.

As with any program, there are areas that need improvement to ensure that the growing number of participants have access to quality care. Some of these areas include reducing the number of ED visits by HealthChoice participants, improving prenatal care, and minimizing racial/ethnic disparities. DHMH is committed to working with CMS and other stakeholders to identify and address necessary programmatic changes.

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The Hilltop Institute

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