The Hilltop Institute

analysis to advance the health of vulnerable populations

Evaluation of the HealthChoice Program

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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. The HealthChoice managed care program currently enrolls over 80 percent of the state's Medicaid population. The program also enrolls children in the Maryland Children's Health Program (MCHP), Maryland's Children's Health Insurance Program (CHIP). Participants in the program choose one of seven managed care organizations (MCOs) and a primary care provider (PCP) from the MCOs' network to oversee their medical care. HealthChoice enrollees receive the same comprehensive benefits as those available to Maryland Medicaid enrollees through the fee-for-service system. Since the program's inception, the Maryland Department of Health and Mental Hygiene (DHMH) has conducted four comprehensive evaluations of the HealthChoice program as part of the 1115 waiver renewals. 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 2011 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 low-income residents 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 MCHP with household incomes below 116 percent of the federal poverty level in July 2008. Enrollment in this expansion program increased from 7,832 enrollees in July 2008 to 73,306 enrollees in March 2011.
- Overall HealthChoice enrollment increased by nearly 46 percent, from 491,332 enrollees in calendar year (CY) 2005 to 715,362 enrollees in CY 2010. By CY 2010, approximately 14 percent of the state population was enrolled in HealthChoice.
- 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 receiving an ambulatory care visit steadily increased between CY 2005 and CY 2009, with nearly 80 percent receiving a visit in CY 2009. Emergency department (ED) visits also increased during the same time period, suggesting that there is still room for improvement in access.

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. HealthChoice enrollees

choose one of seven MCOs and a PCP from the MCOs' network to oversee their medical care and provide a medical home. Related to this goal:

- One method of assessing the extent to which HealthChoice provides enrollees with a medical home is to measure the appropriateness of service utilization, i.e., whether enrollees can identify with and know how to 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. The rates of avoidable ED visits, asthma-related hospitalizations, and diabetes-related hospitalizations all decreased between CY 2005 and CY 2009.
- Another method of examining medical homes is to assess continuity of care. If individuals frequently change MCOs, it may be difficult to establish a medical home. In examining the frequency with which enrollees change MCOS, nearly 90 percent remain within the same MCO over time.

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. Related to this goal:

- Regarding preventive care for children, HealthChoice well-child visit and immunization screening rates increased during the study period and were consistently higher than Medicaid national averages. Blood lead screening rates for children aged 12 to 23 months also improved.
- Regarding preventive care for adults, rates of cervical and breast cancer screening improved during the study period.
- Regarding the quality of care for chronic conditions, the percentage of enrollees receiving appropriate asthma medications improved during the evaluation period. For enrollees with diabetes, rates of eye exams steadily improved during the evaluation period and were consistently higher than the Medicaid national average. The HbA1c and LDL-C screening rates, however, decreased slightly.

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 1997). The Centers for Medicare and Medicaid Services (CMS) approved subsequent waiver renewals in 2005, 2007, and 2010. The 2010 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 2011 annual evaluation of the HealthChoice program. First, the report provides a brief overview of the HealthChoice program and recent program updates. Then, the report addresses the following evaluation topics:

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

As with previous HealthChoice evaluations and renewal applications, this report was conducted collaboratively by DHMH and The Hilltop Institute at the University of Maryland, Baltimore County (UMBC).

Overview of the HealthChoice Program

The HealthChoice managed care program currently enrolls over 80 percent of the state's Medicaid population. The program also enrolls children in the Maryland Children's Health Program (MCHP), Maryland's Children's Health Insurance Program (CHIP). Participants in the program choose one of seven managed care organizations (MCOs) and a primary care provider (PCP) from the 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 receiving Temporary Assistance for Needy Families (TANF)
- Children younger than 19 years eligible for MCHP
- Children in foster care
- Women who are pregnant or less than 60-days postpartum
- Individuals receiving Supplemental Security Income who are younger than 65 years and ineligible for Medicare

Not all Maryland Medicaid beneficiaries are enrolled in HealthChoice MCOs. Groups ineligible 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 short period of time
- Individuals who are continuously enrolled in a long-term care facility or an institution for mental illness for over 30 days
- Individuals residing in an intermediate care facility for the mentally retarded
- Those enrolled in the Employed Individuals with Disabilities program

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 expansion programs under the waiver. REM and Family Planning are further discussed in section IV of this report, and PAC is included in section V.

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

- Inpatient and outpatient hospital care
- Physician care
- Laboratory and x-ray services
- The first 30 days of care in a nursing home
- Home health care
- Durable medical equipment and disposable medical supplies

- Early and periodic screening, diagnosis, and treatment (EPSDT) services for children
- Clinic services
- Dialysis
- Substance abuse treatment services
- Vision services
- Prescription drugs, with the exception of mental health and HIV/AIDS drugs, which are provided under the FFS system

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 Mental Hygiene 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
- Medical day care services for children
- Long-term care services after the first 30 days of care (individuals in long-term care facilities for more than 30 days 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
- 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:

- The PAC program was implemented in July 2006. PAC is a limited benefit program that serves adults aged 19 years and older who are not eligible for Medicare or Medicaid and whose incomes are at or below 116 percent of the federal poverty level (FPL). PAC initially covered primary care, family planning and gynecological, prescriptions, diabetes-related, and some x-ray and laboratory services. Community-based substance

abuse and outpatient emergency department (ED) services were added in January 2010. In 2011, Maryland received approval from CMS to impose enrollment caps on the PAC program in cases where the state determines that it cannot continue to enroll PAC applicants without exceeding the funding available for the program.

- In July 2008, Maryland extended full Medicaid eligibility to parents and caretaker relatives of children enrolled in Medicaid or MCHP with household incomes below 116 percent of the FPL.
- Due 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 to reduce the upper income limit from 250 percent to 200 percent of the 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.
- Maryland convened a broad array of stakeholders to improve dental access and outcomes for children, pregnant women, and adults enrolled in the REM program. As a result, several changes were made to the program to improve dental access. Dental fees for preventive and diagnostic services were increased. Dental services were carved out of the MCO benefit package in July 2009 and are now administered by a single statewide administrative services organization (ASO). A fluoride varnish program was implemented in medical offices serving children aged 9 through 36 months.
- Maryland received $988,177 from the U.S. Department of Health and Human Services to increase access to Medicaid for uninsured children. The funding will be used to further streamline eligibility through the development of an online screening and application tool.

Section I. Coverage and Access

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

Enrollment

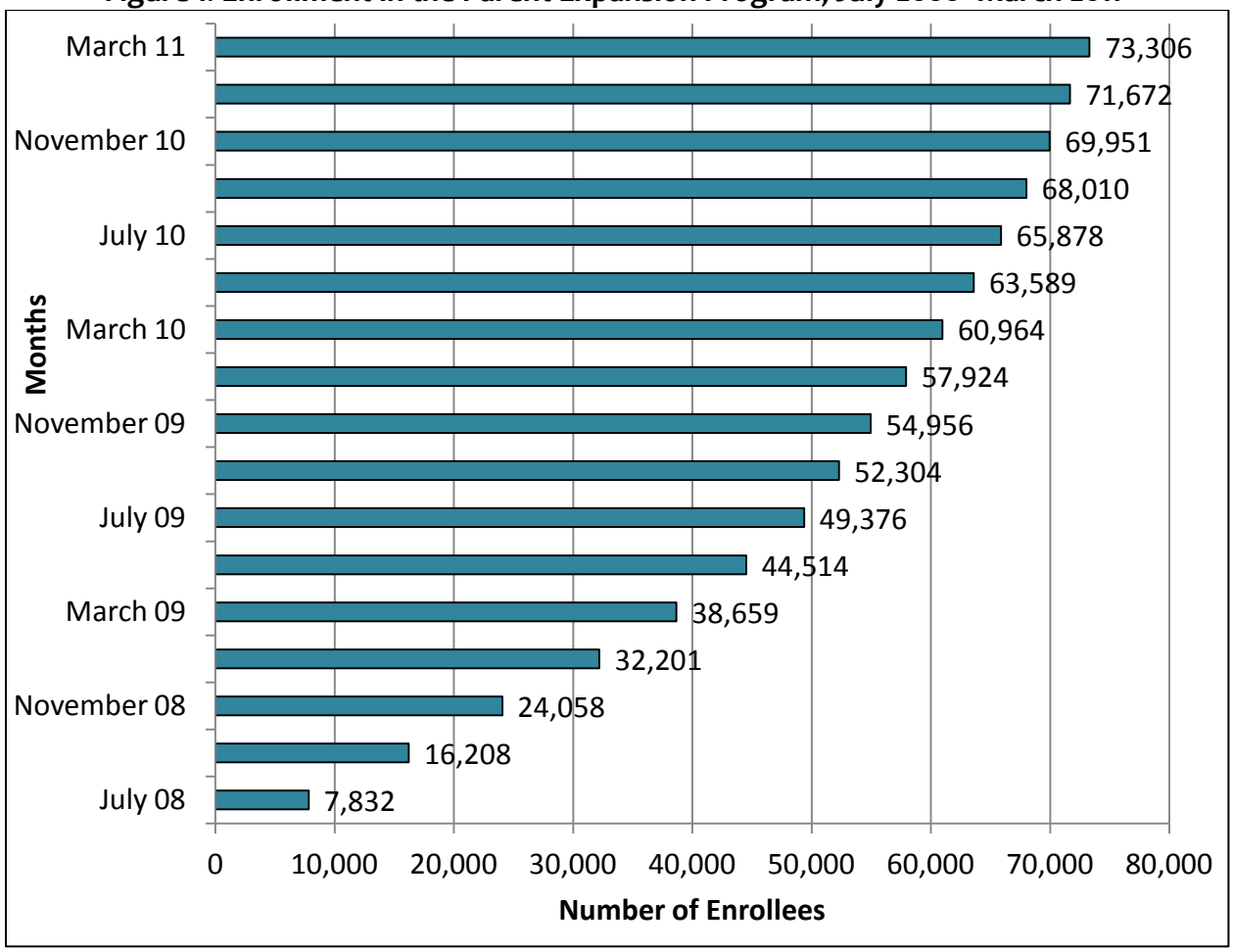
There are several methods available for measuring HealthChoice enrollment. One methodology is to count the number of individuals with any period of enrollment during a given calendar year (CY), including individuals who were only enrolled for a very short period of time. Another method is to count individuals 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.[1]

Maryland has recently engaged in several efforts to encourage increased enrollment in Medicaid. Legislation and federal and private grants have 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 was the increase in the income eligibility for families in Medicaid. Effective July 1, 2008, Maryland expanded the household income 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.

The eligibility expansion occurred at the same time the economy slipped into recession, resulting in dramatic program enrollment. Figure 1 presents the monthly enrollment in this parent expansion program beginning in July 2008. Enrollment increased from 7,832 enrollees in July 2008 to 73,306 enrollees in March 2011.

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

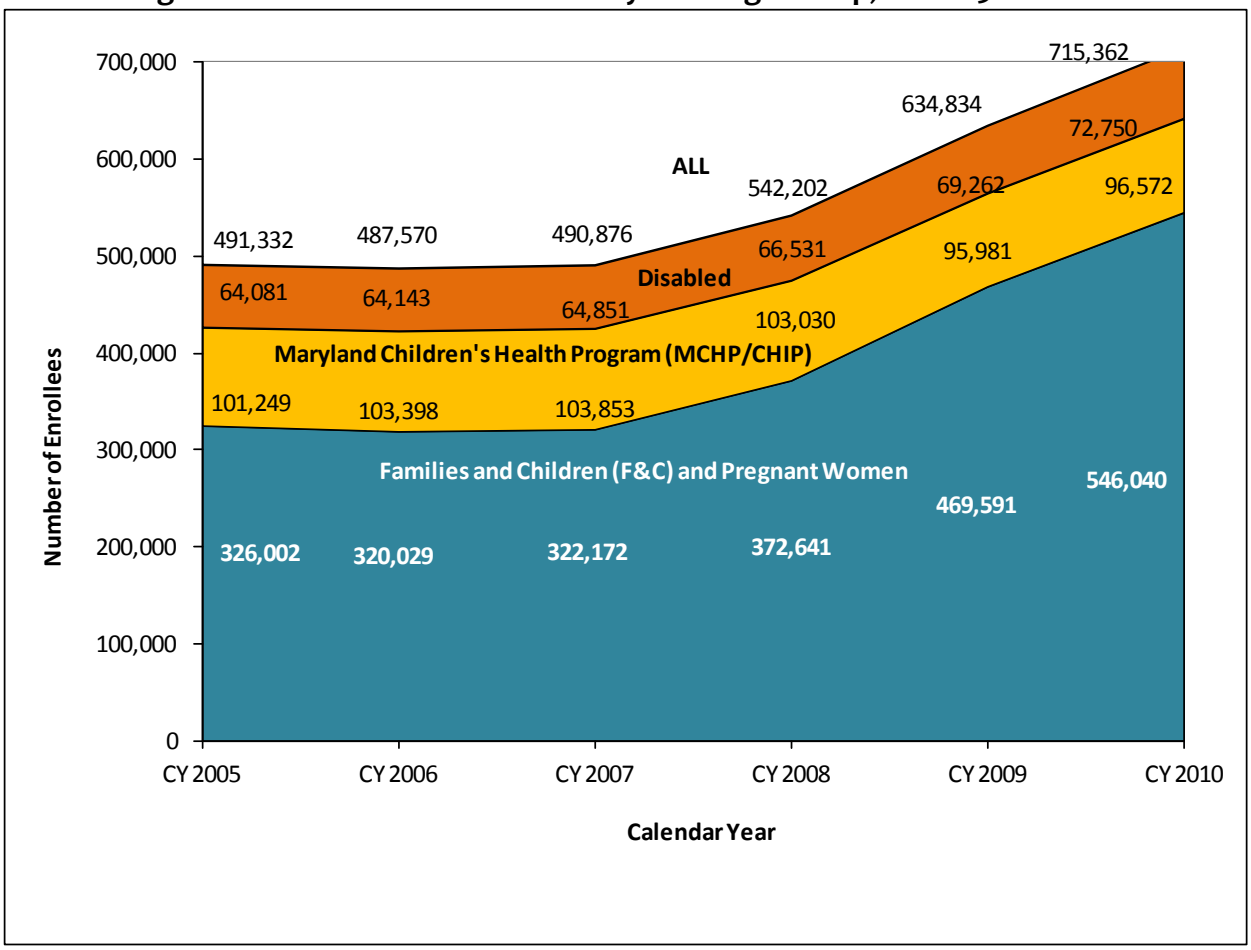
Figure 1. Enrollment in the Parent Expansion Program, July 2008–March 2011



The overall HealthChoice population grew by nearly 46 percent between CY 2005 and CY 2010 (Figure 2). Most of the enrollment increase between CY 2005 and CY 2010 occurred in CY 2009, when HealthChoice grew by more than 17 percent, adding 92,632 new enrollees. A key factor in this enrollment growth was the expansion of Medicaid eligibility in July 2008. Figure 2 displays HealthChoice enrollment by coverage group between CY 2005 and CY 2010. As of December 31 of each year, most HealthChoice enrollees were eligible in the families, children, and pregnant women (F&C) category. Overall, F&C enrollment grew by 67 percent between CY 2005 and CY 2010. Individuals with disabilities comprised the smallest eligibility category in each of the years under review.[2]

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

Figure 2. HealthChoice Enrollment by Coverage Group, CY 2005–CY 2010



Between the beginning of the recession in 2007 and June 2010, the national unemployment rate increased from 5.0 percent to 9.5 percent (Kaiser Commission on Medicaid and the Uninsured, 2011). At the same time, national Medicaid enrollment increased by 17.8 percent, and national enrollment reached an all-time high of 50.3 million by June 2010 (Kaiser Commission on Medicaid and the Uninsured, 2011). According to the Kaiser Commission on Medicaid and the Uninsured, Maryland was one of ten states that accounted for 60 percent of Medicaid enrollment growth between 2009 and 2010, and Maryland experienced the fourth highest growth rate of all 50 states and the District of Colombia (2011).

Table 1 shows the percentage of Maryland's population enrolled in HealthChoice between CY 2005 and CY 2010. These data are presented for individuals enrolled in HealthChoice as of December 31 and for individuals with any period of HealthChoice enrollment. The percentage of the Maryland population with any period of HealthChoice enrollment remained at approximately 11 percent between CY 2005 and CY 2008 and increased to 14 percent by CY 2010.

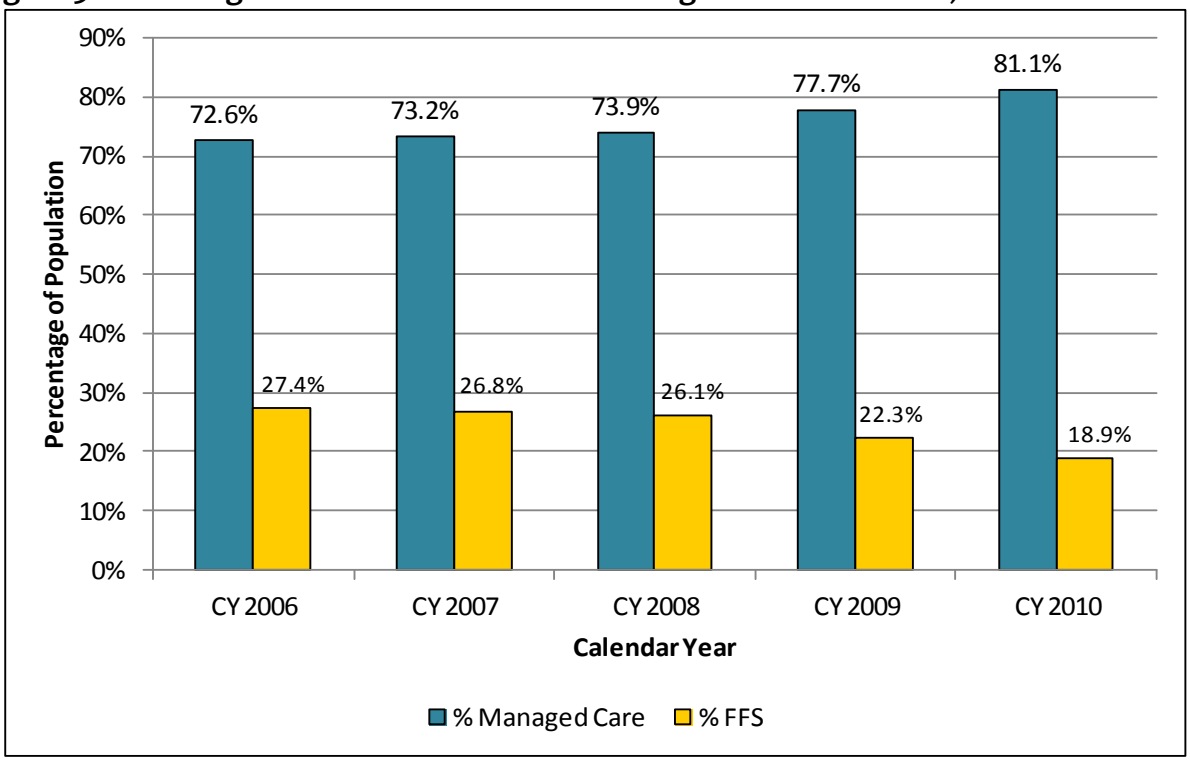
Table 1. HealthChoice Enrollment as a Percentage of the Maryland Population, CY 2005 – CY 2010

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009	CY 2010
Maryland Population*	5,582,520	5,612,196	5,634,242	5,658,655	5,699,478	5,799,380
	Individuals Enrolled in HealthChoice as of December 31					
HealthChoice Population	491,332	487,570	490,876	542,202	634,834	715,362
% of Maryland Population in HealthChoice	8.8%	8.7%	8.7%	9.6%	11.1%	12.3%
	Individuals Enrolled in HealthChoice for Any Period of Time					
HealthChoice Population	617,191	624,193	623,299	654,412	743,098	832,684
% of Maryland Population in HealthChoice	11.1%	11.1%	11.1%	11.6%	13.0%	14.4%

*Maryland Population Data Source: Maryland, Department of Planning, 2010

One of the original goals of the HealthChoice program was to enroll most individuals into managed care. Figure 3 presents the percentage of Maryland Medicaid beneficiaries who were enrolled in managed care (including both HealthChoice and PAC MCOs) as compared to FFS enrollment between CY 2006 and CY 2010.Between CY 2006 and CY 2010, the proportion of FFS to overall Medicaid enrollment decreased from 27 percent in CY 2006 to 19 percent in CY 2010. By CY 2010, managed care accounted for 81 percent of Medicaid enrollment.

Figure 3. Percentage of Medicaid Enrollees in Managed Care versus FFS, CY 2006 – CY 2010



Network Adequacy

One 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 enrollee to have a PCP, and each MCO must have enough PCPs to serve its enrollee population. As a general standard for assessing an individual MCO's capacity, HealthChoice regulations require a ratio of 1 PCP to every 200 enrollees within each of the 40 local access areas (LAAs) in the state. Because some PCPs traditionally serve a high volume of HealthChoice enrollees at some of their sites (e.g., federally qualified health center physicians), the regulations permit DHMH to approve a ratio of 1 provider per 2,000 enrollees. MCOs are required to regularly submit information on their provider networks to DHMH. The review of PCP to enrollee ratios allows DHMH to assess potential network deficiencies and work with the MCOs to correct capacity issues. Table 2 shows PCP network adequacy through March 1, 2011. Two capacity estimates are presented: 200 enrollees per PCP and 500 enrollees per PCP. Although regulatory requirements apply to a single MCO, this analysis aggregates data from all seven MCOs. The analysis does not allow a single provider who contracts with multiple MCOs to be counted multiple times; thus, it applies a higher standard than that in regulation.

Table 2.PCP Capacity by Local Access Area, as of March 2011

	Total PCPs			Enrollment	Excess Capacity	
Local Access Area	March, 2011	Multiplied by 200	Multiplied by 500	March, 2011	Difference 200:1 Ratio	Difference 500:1 Ratio
Allegany	67	13,400	33,500	12,338	1,062	21,162
Anne Arundel North	204	40,800	102,000	26,982	13,818	75,018
Anne Arundel South	188	37,600	94,000	15,027	22,573	78,973
Baltimore City SE/Dundalk	225	45,000	112,500	24,447	20,553	88,053
Baltimore City East	397	79,400	198,500	31,094	48,306	167,406
Baltimore City N. Central	91	18,200	45,500	13,494	4,706	32,006
Baltimore City N. East	96	19,200	48,000	25,077	-5,877	22,923
Baltimore City N. West	237	47,400	118,500	22,157	25,243	96,343
Baltimore City South	80	16,000	40,000	18,973	-2,973	21,027
Baltimore City West	359	71,800	179,500	40,246	31,554	139,254
Baltimore County East	205	41,000	102,500	23,624	17,376	78,876
Baltimore County North	287	57,400	143,500	13,858	43,542	129,642
Baltimore County N. West	118	23,600	59,000	29,272	-5,672	29,728
Baltimore County S. West	163	32,600	81,500	22,031	10,569	59,469
Calvert	57	11,400	28,500	8,668	2,732	19,832
Caroline	27	5,400	13,500	7,098	-1,698	6,402
Carroll	90	18,000	45,000	12,321	5,679	32,679
Cecil	67	13,400	33,500	15,047	-1,647	18,453
Charles	78	15,600	39,000	14,793	807	24,207
Dorchester	30	6,000	15,000	6,938	-938	8,062
Frederick	85	17,000	42,500	18,781	-1,781	23,719
Garrett	22	4,400	11,000	5,111	-711	5,889
Harford East	31	6,200	15,500	7,297	-1,097	8,203
Harford West	78	15,600	39,000	14,640	960	24,360
Howard	142	28,400	71,000	18,537	9,863	52,463
Kent	22	4,400	11,000	2,980	1,420	8,020
Montgomery-Silver Springs	166	33,200	83,000	43,031	-9,831	39,969
Montgomery-Mid County	190	38,000	95,000	13,520	24,480	81,480
Montgomery-North	103	20,600	51,500	31,055	-10,455	20,445
Prince George's N East	84	16,800	42,000	16,975	-175	25,025
Prince George's N West	169	33,800	84,500	60,295	-26,495	24,205
Prince George's S East	56	11,200	28,000	11,008	192	16,992
Prince George's S West	67	13,400	33,500	27,792	-14,392	5,708
Queen Anne's	24	4,800	12,000	5,019	-219	6,981
Somerset	28	5,600	14,000	4,524	1,076	9,476
St. Mary's	67	13,400	33,500	11,936	1,464	21,564
Talbot	43	8,600	21,500	4,281	4,319	17,219
Washington	118	23,600	59,000	21,768	1,832	37,232
Wicomico	68	13,600	34,000	18,742	-5,142	15,258
Worchester	32	6,400	16,000	7,012	-612	8,988
Total	**4,661**	**932,200**	**2,330,500**	**727,789**	**204,411**	**1,602,711**

Based on a capacity standard of 500 enrollees to 1 PCP, provider networks in each LAA are more than adequate. However, there are a few areas where the standard of 200 enrollees per PCP is not met: two in Baltimore City, one in Baltimore County, one in Fredrick County, one in Harford County, two in Montgomery County, two in Prince Georges County, one in Garrett County, and six on the Eastern Shore.

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 a specialist in network, it must pay for an out-of-network provider. Following the 2002 HealthChoice evaluation, DHMH worked with a stakeholder group to develop standards for specialty care access and created regulations for these standards in 2004. The regulations mandate that each MCO have an in-network contract with at least one provider statewide in the following specialties: allergy, dermatology, endocrinology, infectious disease, nephrology, and pulmonology. Each MCO must also include at least one in-network specialist in each of the 10 regions throughout the state for the following eight core specialties: cardiology, otolaryngology (ENT), gastroenterology, neurology, opthamology, orthopedics, surgery, and urology.

As of March 2011, all but one of the MCOs met all of the criteria for in-network specialists. This MCO met all of the criteria except for the regional in-network requirement for ENTs and neurology. DHMH required this MCO to submit a corrective action plan. Meanwhile, the MCO is making out-of-network specialists and specialists in neighboring regions available to their enrollees.

CAHPS Survey Results

DHMH uses the Consumer Assessment of Healthcare Providers and Services (CAHPS) survey to measure HealthChoice members' satisfaction with their medical care (WBA Market Research, 2010; WBA Market Research 2008; The Myers Group 2007; The Myers Group, 2006). Two CAHPS survey measures relate to access: "getting needed care" and "getting care quickly." "Getting needed care" is defined as obtaining health care from doctors and specialists through health plans. "Getting care quickly" is defined as receiving treatments and appointments as soon as they were needed. The survey responses for these two measures were always, usually, sometimes, or never.

In CY 2009, the percentage of adult HealthChoice members who responded that they were usually or always successful in "getting needed care" was 74 percent, and 80 percent of adult members responded that they were usually or always successful in "getting care quickly" (Table 3). Both of these percentages are similar to the CY 2009 National Committee for Quality Assurance (NCQA) Quality Compass benchmark (WBA Market Research, 2010; WBA Market Research 2008; The Myers Group 2007; The Myers Group, 2006).

Table 3. Percentage of Adults Responding Usually or Always Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2005–CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Getting Needed Care - Percentage Responding Usually or Always					
HealthChoice	72%	72%*	73%	74%	74%
NCQA Quality Compass Benchmark	N/A	N/A	75%	76%	75%
Getting Care Quickly - Percentage Responding Usually or Always					
HealthChoice	79%	82%	80%	82%	80%
NCQA Quality Compass Benchmark	81%	N/A	80%	80%	79%

*Due to significant changes in the 2007 CAHPS 4.0H Survey (CY 2006), comparison to previous years is not appropriate.

In CY 2009, 74 percent of parents and guardians of children enrolled in HealthChoice responded usually or always "getting needed care" for their children, which is lower than the national benchmark of 79 percent (Table 4). Eighty-eight percent of the parents and guardians surveyed responded usually or always "getting care quickly" for their children, which is similar to the CY 2009 national benchmark of 87 percent.

Table 4. Percentage of Parents/Guardians Responding Usually or Always Getting Needed Care and Getting Care Quickly Compared with the NCQA Benchmark, CY 2005–CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Getting Needed Care - Percentage Responding Usually or Always					
HealthChoice	81%	80%	80%	76%*	74%
NCQA Quality Compass Benchmark	79%	N/A	82%	79%*	79%
Getting Care Quickly - Percentage Responding Usually or Always					
HealthChoice	80%	80%	79%	89%*	88%
NCQA Quality Compass Benchmark	79%	N/A	78%	86%*	87%

*Due to significant changes in the 2009 CAHPS 4.0H Survey (CY 2008), comparison to previous years is not appropriate.

The parents or guardians of children with chronic conditions in HealthChoice were also surveyed (Table 5). In CY 2009, 75 percent responded usually or always "getting needed care" for their children. Ninety percent reported usually or always "getting care quickly." National benchmarks for this population are not available.

Table 5. Percentage of Parents/Guardians of Children with Chronic Conditions Responding Usually or Always Getting Needed Care and Getting Care Quickly, CY 2005 - CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Getting Needed Care - Percentage Responding Usually or Always					
HealthChoice	78%	76%	77%	75%*	75%
Getting Care Quickly - Percentage Responding Usually or Always					
HealthChoice	79%	79%	79%	90%*	90%

*Due to significant changes in the 2009 CAHPS 4.0H Survey (CY 2008), comparison to previous years is not appropriate.

Access to Care

This section of the report examines ambulatory care and ED visits to evaluate access to care.

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. This definition excludes ED visits, hospital inpatient services, substance abuse treatment, mental health, home health, x-rays, and laboratory services. In this section of the report, ambulatory care visits are measured using MCO and FFS data.

Figure 4 presents the percentage of the HealthChoice enrollees who received an ambulatory care visit during the calendar year by age group. Overall, the ambulatory care visit rate increased from 72.9 percent in CY 2005 to 77.8 percent in CY 2009, and the rate increased for all age groups during the measurement period.

Figure 4. Percentage of the HealthChoice Population Receiving an Ambulatory Care Visit by Age Group, CY 2005 – CY 2009

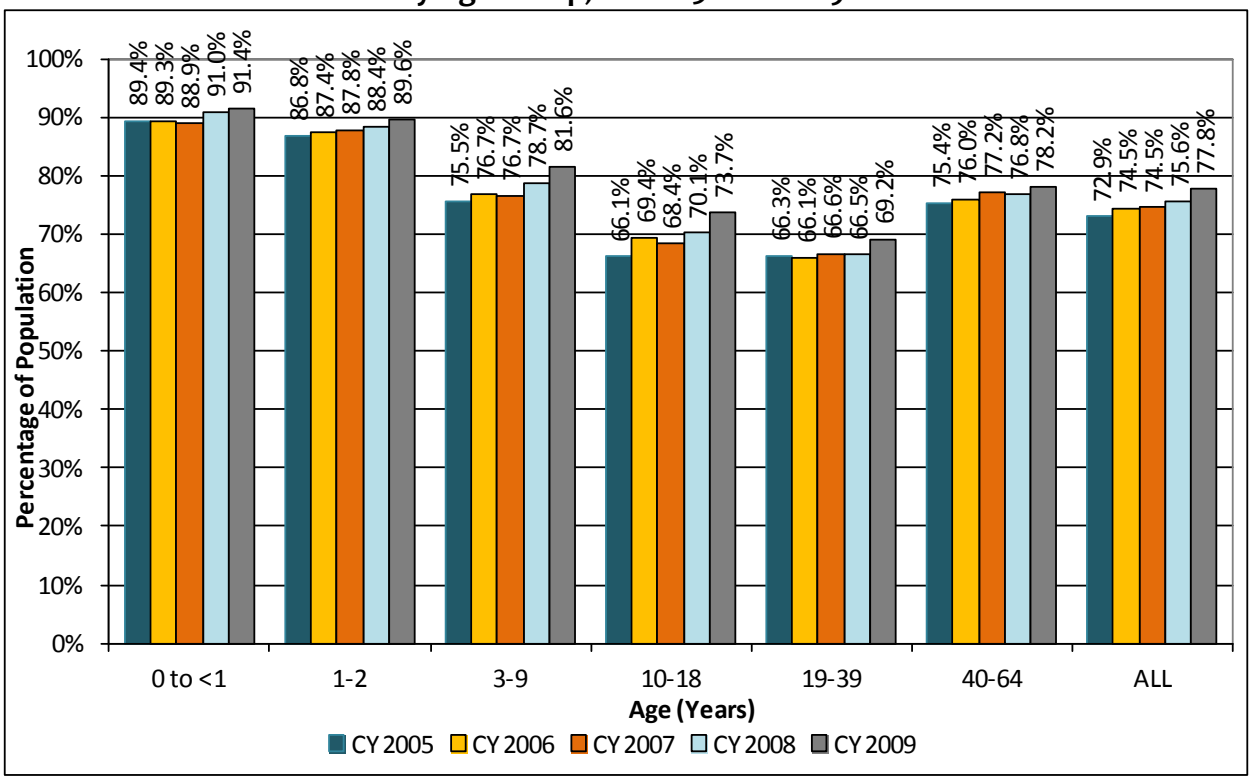
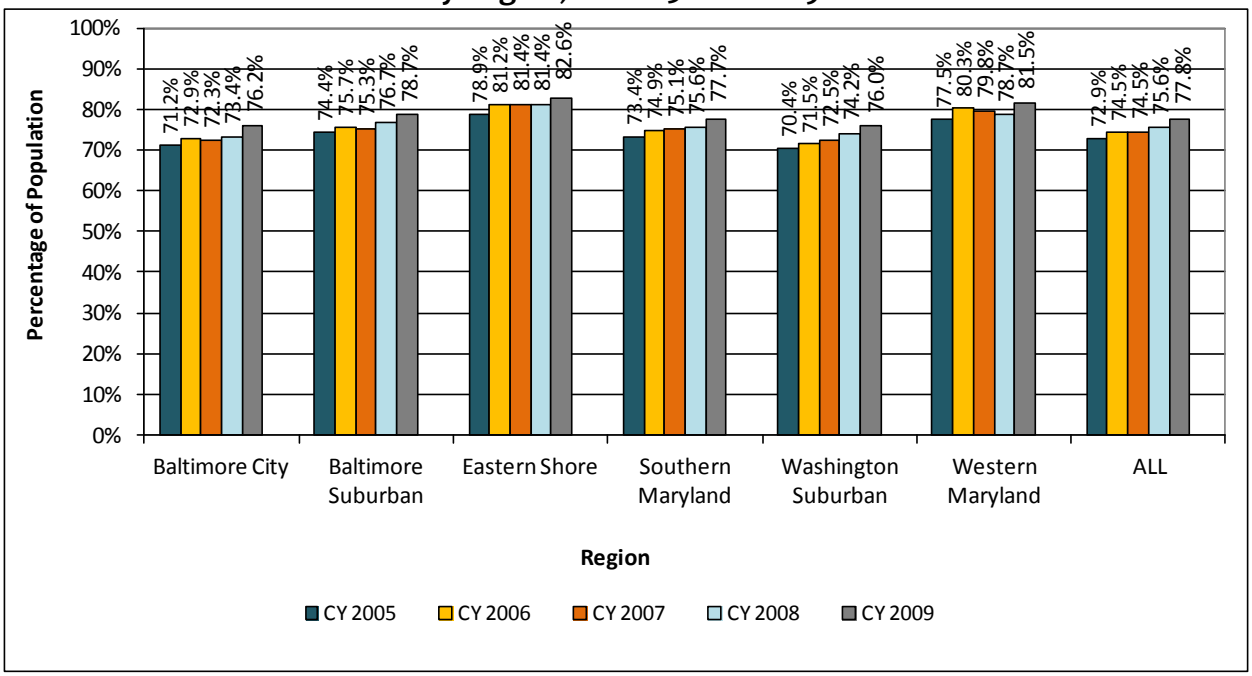


Figure 5 presents the percentage of the HealthChoice population receiving ambulatory care services by region. The visit rate increased within each region between CY 2005 and CY 2009.

Figure 5. Percentage of the HealthChoice Population Receiving an Ambulatory Care Visit by Region, CY 2005 – CY 2009



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 overall ED use by coverage group. Overall, ED use among HealthChoice enrollees increased by approximately 6 percentage points between CY 2005 and CY 2009. Enrollees with disabilities were more likely to utilize ED services than any other coverage group.

Figure 6. Percentage of the HealthChoice Population with at Least One ED Visit by Coverage Group, CY 2005 – CY 2009

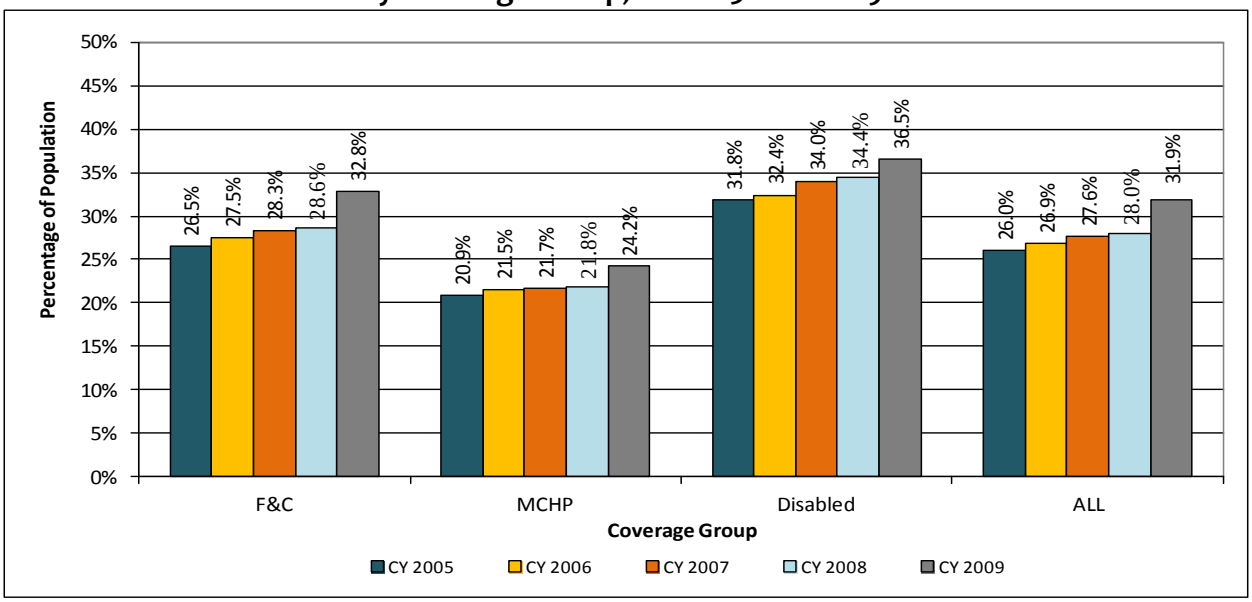
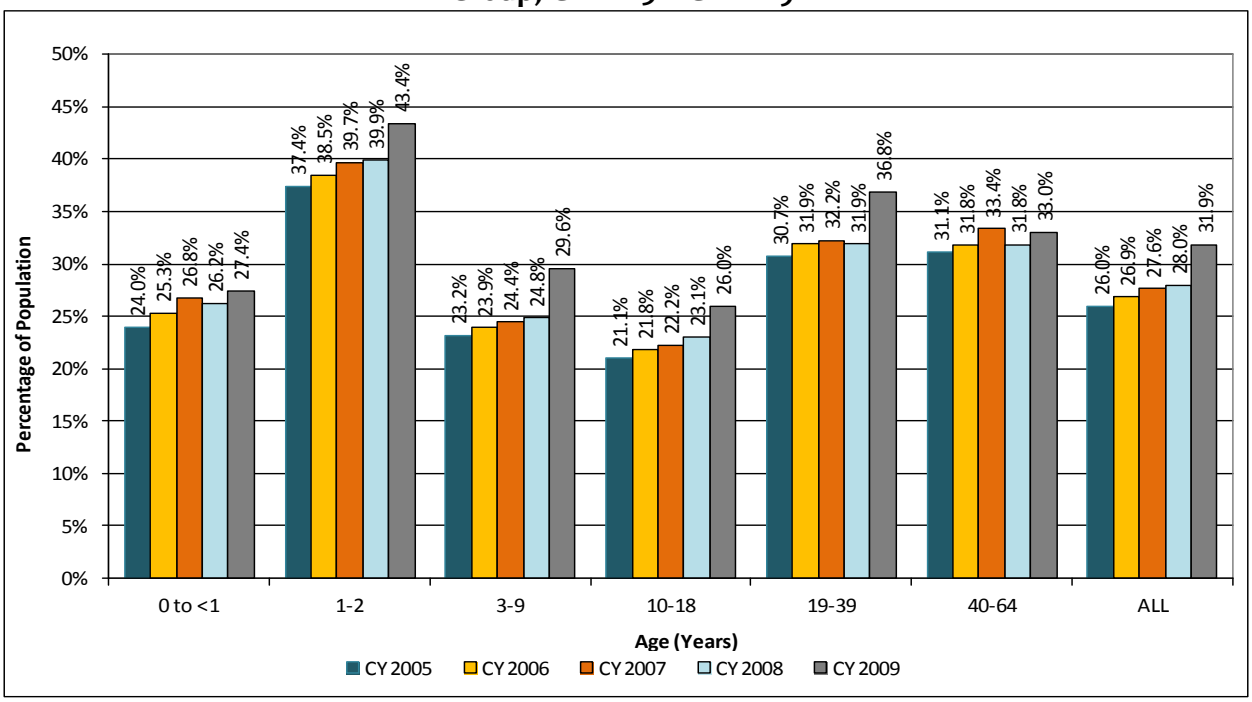


Figure 7 presents ED utilization by age group. Children aged one and two years consistently had the highest ED utilization throughout the evaluation period.

Figure 7. Percentage of the HealthChoice Population with at least One ED Visit by Age Group, CY 2005 – CY 2009



Section I Summary

This section of the report discussed 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 March 2011, 73,306 new parents and caretaker relatives were covered under HealthChoice. The overall HealthChoice population grew by 46 percent between CY 2005 and CY 2010. By CY 2010, approximately 14 percent of the state population was enrolled in HealthChoice. 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 PCP networks, there are several areas in the state that do not meet conservative network adequacy standards. The specialist network standards were met across all MCOs and regions in the state, except for one region, where one MCO did not meet the requirements for neurologists and ENTs. However, CAHPS survey results indicate that most enrollees report that they usually or always receive needed care and receive needed care quickly. Looking at service utilization as another measure of access, the percentage of enrollees receiving an ambulatory care visit steadily increased during the measurement period, with nearly 80 percent of enrollees receiving a visit in CY 2009. ED visits also increased during the same time period, suggesting that there is still room for improvement in access.

Section II. Medical Home

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

Appropriate Service Utilization

This section addresses whether enrollees could identify with and know how to 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.

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). The algorithm categorizes emergency visits as follows:

1. *Non-emergent*: Immediate care was not required within 12 hours based on 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 principle 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 be indicative of problems with access to primary care. Figure 8 presents the distribution of all ED visits by NYU classification for CY 2009 for individuals with any period of HealthChoice enrollment. In CY 2009, 52.4 percent of all ED visits were for potentially avoidable conditions, meaning that the visit could have been avoided with timely and quality primary care.[3] Enrollees in the F&C and MCHP coverage groups had higher rates of potentially avoidable visits than enrollees with disabilities.

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 25.1 percent of all ED visits in CY 2009. Adults aged 21 through 39 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 to other age groups. The inpatient category in Figure 8, which is not part of the NYU classification, represents ED visits that resulted in a hospital admission. Enrollees with disabilities had a much higher rate of ED visits that led to an inpatient admission than the F&C and MCHP coverage groups.

[3] This figure combines categories 1 through 3: non-emergent, emergent but primary care treatable, and emergent but preventable/avoidable.

Figure 8. Classification of ED Visits by HealthChoice Enrollees, CY 2009

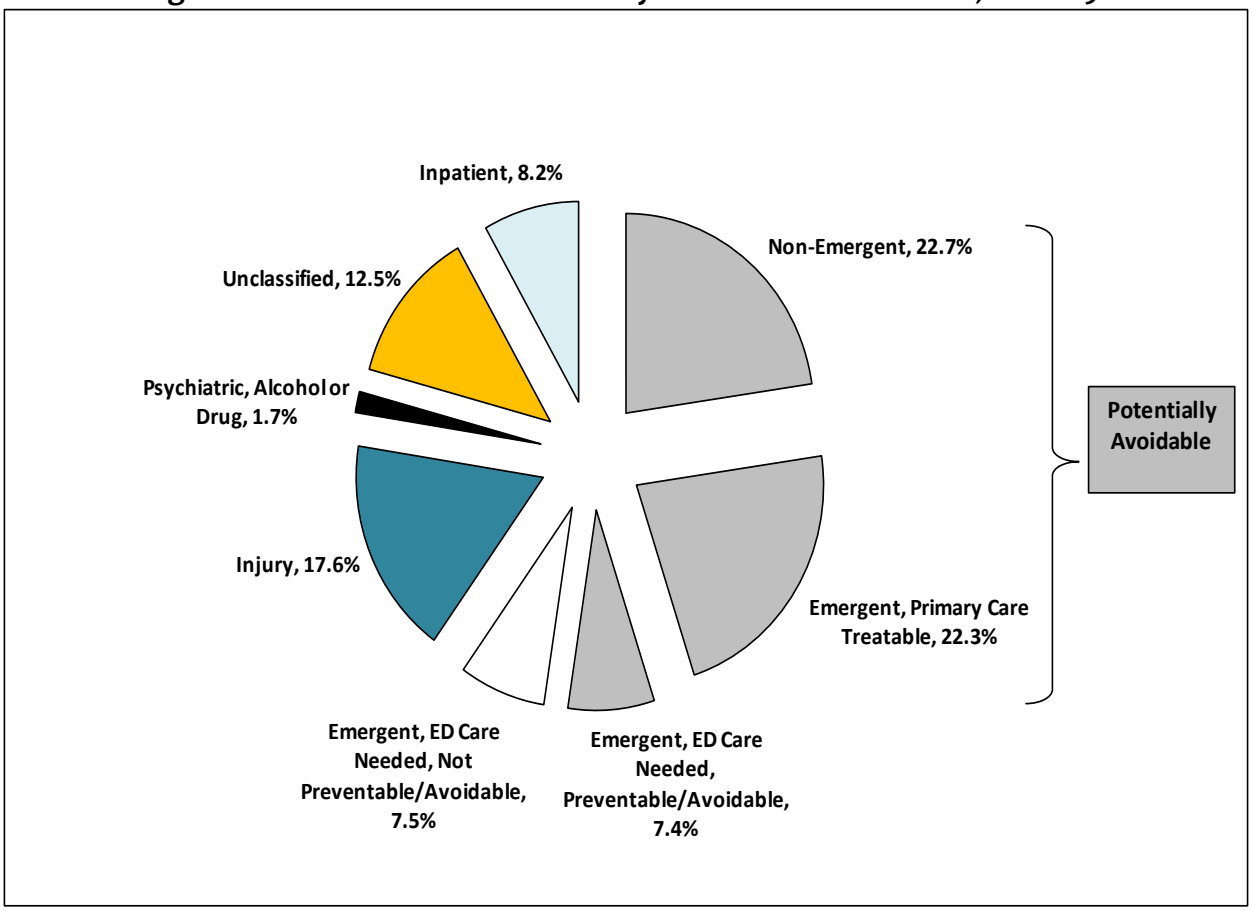
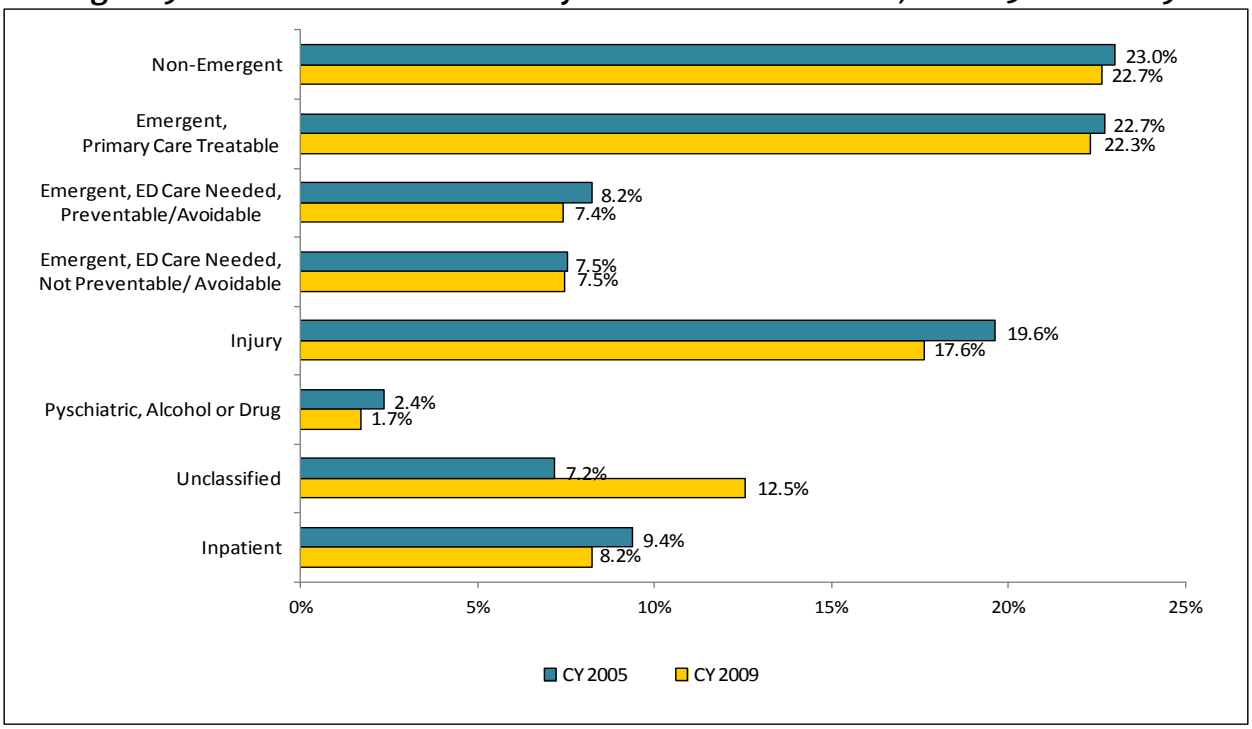


Figure 9 compares the ED visit classifications for CY 2005 with classifications for CY 2009. The data show that potentially avoidable ED visits decreased during the evaluation period. ED visits for injuries decreased by 2 percentage points over the evaluation period, while visits that were unclassified increased by 5.3 percentage points. The rate of unpreventable or unavoidable ED visits remained at 7.5 percent.

Figure 9. Classification of ED Visits by HealthChoice Enrollees, CY 2005 and C 2009



Ambulatory Care Sensitive Hospitalizations

Ambulatory care sensitive hospitalizations (ACSHs), also referred to as preventable or avoidable hospitalizations, are hospital admissions considered preventable if proper ambulatory care had been provided in a timely and effective manner. High numbers of avoidable hospitalizations may be indicative of problems with access to primary care services or deficiencies in outpatient management and follow-up. DHMH monitors avoidable asthma and diabetes admission rates by using a combination of HEDIS enrollment criteria and Agency for Healthcare Research and Quality (AHRQ) clinical criteria to identify enrollees[4] with any hospital admission who had a primary diagnosis of asthma or short-term diabetes with complications.

Table 6 presents the rate of diabetes-related admissions for enrollees aged 21 through 64 years and asthma-related admissions for enrollees aged 5 through 20 years. The avoidable admission rate for diabetes decreased from 25 admissions per 1,000 members in CY 2005 to 19 admissions per 1,000 members in CY 2010. The avoidable admission rate for asthma also decreased from 46 admissions per 1,000 members in CY 2005 to 38 admissions per 1,000 members in CY 2010. The admission rate for both measures decreased between CY 2009 and CY 2010.

[4] To be included, individuals had to be continuously enrolled for 320 days during the calendar year and enrolled as of December 31, with no more than one gap in enrollment of up to 45 days.

Table 6. Asthma- and Diabetes-Related Admissions per One Thousand Members, CY 2005 – CY2010

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009	CY 2010
Diabetes (Enrollees Aged 21 – 64 Years)						
Number of Diabetes-Related Avoidable Hospital Admissions	199	204	188	182	258	331
Rate per 1,000 HEDIS-Eligible Adults with Diabetes	25	25	22	21	24	19
Asthma (Enrollees Aged 5 – 20 Years)						
Number of Asthma-Related Avoidable Hospital Admissions	257	275	330	290	381	392
Rate per 1,000 HEDIS-Eligible Children with Asthma	46	44	49	39	43	38

Continuity of Care

In addition to looking at appropriate service utilization, medical homes may be examined by assessing continuity of care. If individuals frequently change MCOs, it may be difficult to establish a medical home. Table 7 presents the percentage of the HealthChoice population that was enrolled in more than one MCO over a three-year period. In each evaluation period, approximately 87 percent of enrollees remained within one MCO over a three-year period, indicating that most enrollees do not change MCOs frequently and thus have a greater opportunity to establish a medical home.

Table 7. Percentage of HealthChoice Population Enrolled in One or More MCOs, Three-Year Look Back

Number of MCOs	CY 2003-2005	CY 2004 - 2006	CY 2005-2007	CY 2006-2008	CY 2007-2009
1	86.7%	87.2%	87.8%	87.3%	86.9%
2	12.5%	12.1%	11.5%	12.0%	12.4%
3 or More	0.7%	0.7%	0.6%	0.8%	0.7%

Section II. Summary

This section of the report sought to address the extent to which HealthChoice provides enrollees with a medical home by assessing appropriateness of service utilization and continuity of care. Looking at appropriateness of care, potentially avoidable ED visits and asthma- and diabetes-related ACSHs decreased during the study period. Looking at continuity of care, most enrollees (nearly 90 percent) did not change MCOs across multiple years.

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 Organization annual report, the CAHPS survey of consumer satisfaction, the value-based purchasing (VBP) program, and the Healthcare Effectiveness Data and Information Set (HEDIS) quality measurements. 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.

Preventive Care

HEDIS Childhood Measures

DHMH uses HEDIS measures to report childhood immunization rates and well-child visits (HealthcareData Company, LLC, 2010). Immunizations are a proven method to safely and effectively prevent severe illnesses, such as polio and hepatitis. The HEDIS immunization measures include the percentage of two-year-old children who receive the following immunizations in their lifetime: 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 three includes all these vaccines, while combination two includes all the vaccines except the four PCV immunizations.

The HEDIS well-child measures include the following:

- The percentage of 15-month old infants who received at least five well-child visits with a PCP
- The percentage of children aged three to six years who received at least one well-child visit
- The percentage of adolescents aged 12 to 21 years who received at least one well-care visit

Table 8 compares the HealthChoice program with the HEDIS Medicaid national average on the immunization and well-child measures. HealthChoice performed above the HEDIS Medicaid average across all measures and all years with available data during the study period. Within the HealthChoice program:

- The percentage of two-year-old children receiving immunization combination two increased by 3 percentage points during the measurement period

- The percentage of children receiving immunization combination three increased by 25 percentage points during the measurement period
- The percentage of 15-month-old infants who received at least five well-child visits increased by 1 percentage point during the measurement period
- The percentage of children aged three to six years who received at least one well-child visit increased by 12 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 11 percentage points during the measurement period

Table 8. HEDIS Immunizations and Well-Child Visits: HealthChoice Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009

HEDIS MEASURES	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Childhood Immunizations- Combination 2					
HealthChoice	77%	78%	81%	82%	80%
HEDIS Medicaid National Average	70%	73%	72%	74%	74%
Childhood Immunizations- Combination 3					
HealthChoice	51%	68%	74%	77%	76%
HEDIS Medicaid National Average	43%	61%	66%	68%	69%
Well Child Visits - 15 Months of Life					
HealthChoice	82%	85%	82%	83%	83%
HEDIS Medicaid National Average	67%	73%	70%	75%	76%
Well Child Visits – 3-6 year olds					
HealthChoice	70%	77%	77%	77%	82%
HEDIS Medicaid National Average	63%	67%	65%	70%	72%
Well-Care Visits - Adolescents					
HealthChoice	52%	59%	53%	55%	63%
HEDIS Medicaid National Average	41%	44%	42%	46%	48%

EPSDT Review

The ESPDT program is a required package of benefits for all Medicaid enrollees under the age of 21 years. The purpose of EPSDT is to ensure that children receive proper somatic health, mental health, and developmental care to prevent the development of or increase in illness or disability. 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 and measures 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*: These tests involve assessing the risk factors related to heart disease, anemia, tuberculosis, lead exposure, and sexually transmitted diseases (STDs/HIV).
- *Immunizations*: Providers who serve HealthChoice enrollees 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.

Overall, provider compliance with four of the five EPSDT components decreased during the measurement period (Table 9) (Delmarva Foundation, 2010; Delmarva Foundation, 2007). Compliance with laboratory tests/risk screenings increased by 1 percentage point. Provider compliance with immunizations decreased from 94 percent in CY 2005 to 85 percent in CY 2009. This decline is likely explained by the addition of two new immunizations into the scoring calculation, and the emphasis on the H1N1 vaccine instead of the standard influenza vaccine in CY 2009.

Table 9. HealthChoice MCO Aggregate Composite Scores for Components of the EPSDT Review, CY 2005 – CY 2009

EPSDT Components	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Health and Developmental History	89%	90%	81%	85%	86%
Comprehensive Physical Exam	95%	96%	91%	92%	93%
Laboratory Tests/ At Risk Screenings	79%	78%	74%	78%	80%
Immunizations	94%	94%	93%	93%	85%
Health Education/ Anticipatory Guidance	90%	90%	88%	89%	88%

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 so 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 EPDST benefit, 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.[5] In prior years, DHMH calculated this rate for lead tests occurring during the calendar year only. In CY 2008, however, DHMH changed the specifications to include lead tests occurring during the calendar year or the year prior to more closely align the measure with the new HEDIS lead screening in children measure. Therefore, data are only presented for CY 2008 through CY 2010.

Table 10 presents the lead testing rate for children aged 12 through 23 months and 24 through 35 months between CY 2008 and CY 2010. The lead testing rate increased by approximately 2 percentage points for 12 through 23-month olds and remained stable at approximately 76 percent for 24 though 35 month-olds.

Table 10. 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 2008–CY 2010

Age	2008	2009	2010
12 – 23 Months	55.7%	55.5%	57.5%
24 – 35 Months	76.0%	75.7%	75.6%

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, n.d.a). With the exception of non-melanoma skin cancer, breast cancer is the most prevalent type of cancer among American women (CDC, 2010). When breast cancer is detected early, women have more treatment options and a greater chance of survival (CDC, n.d.a). HEDIS assesses the percentage of women who received a mammogram within a two-year period. In CY 2005, HEDIS included women aged 50 through 69 years in this measure. In CY 2006, however, HEDIS expanded the measure to include women aged 40 through 69 years. Although there has been recent debate over the appropriate age requirements for mammograms, HEDIS continues to include this measure.

Table 11 compares the percentage of women in HealthChoice who received a mammogram for breast cancer screening with the HEDIS Medicaid national average for CY 2005 through CY 2009 (HealthcareData Company, LLC, 2010). Between CY 2006 and CY 2009, the percentage of women aged 40 through 69 years receiving a mammogram increased by 6 percentage points. Maryland performed slightly below the HEDIS Medicaid national average between CY 2006 and CY 2009.

[5] 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.

Table 11. Percentage of Women in HealthChoice Receiving a Mammogram for Breast Cancer Screening Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
	Aged 50-69 Years	Aged 40-69 Years			
HealthChoice	55%	44%*	47%	49%	50%
HEDIS Medicaid National Average	54%	49%*	50%	51%	52%

*Due to significant changes in the specifications for the 2007 HEDIS measurement year (CY 2006), a comparison to prior years is not appropriate.

Cervical Cancer Screening

Cervical cancer is preventable and treatable. The CDC recommends PAP tests for women who are sexually active or over the age of 21 years (CDC, n. d.c). Because PAP tests can detect precancerous cells early, cervical cancer can be treated or altogether avoided (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. In CY 2005, HEDIS included women aged 18 through 64 years in this measure. In CY 2006, however, HEDIS restricted the measure to women aged 21 through 64 years.

Table 12 compares the percentage of women in HealthChoice who received a cervical cancer screening with the HEDIS Medicaid national average for CY 2005 through CY 2009 (HealthcareData Company, LLC, 2010). Because of the change in the age requirement in CY 2006, a comparison to prior years is not appropriate for this measure. Between CY 2006 and CY 2009, the percentage of women in HealthChoice who received a PAP test for cervical cancer screening increased by 6 percentage points. HealthChoice performed slightly below the HEDIS Medicaid national average in CY 2006 and CY 2007 and slightly above the average in CY 2008 and CY 2009.

Table 12. Percentage of Women in HealthChoice Receiving a Cervical Cancer Screening Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
	Aged 18-64 Years	Aged 21-64 Years			
HealthChoice	59%	62%*	63%	67%	68%
HEDIS Medicaid National Average	65%	66%*	65%	66%	66%

*Due to significant changes in the specifications for the 2007 HEDIS measurement year (CY 2006), a comparison to prior years is not appropriate

Colorectal Cancer Screening

According to the National Cancer Institute, colorectal cancer is one of the most common cancers in both men and women (n.d.b). Colorectal cancer usually develops from precancerous polyps

(abnormal growths) in the colon or rectum. Screening tests can find precancerous polyps, so that they can be removed before they turn into cancer (CDC, n.d.b). Screening tests can also find colorectal cancer early, when treatment works best (National Cancer Institute, n.d.). HEDIS assesses the percentage of enrollees aged 50 through 75 years who received an appropriate screening for colorectal cancer. HEDIS defines appropriate screenings according to the following: a fecal occult blood test during the measurement, a flexible sigmoidoscopy during the measurement year or the prior four years, and a colonoscopy during the measurement or the prior nine years.

Table 13 presents the percentage of enrollees in HealthChoice who received at least one of the three appropriate screenings for colorectal cancer for CY 2005 through CY 2009. Please note that the HEDIS specifications include enrollees through age 75 years. Because HealthChoice only covers individuals through age 64 years, the data presented pertain to enrollees aged 50 through 64 years. Between CY 2005 and CY 2009, the percentage of enrollees aged 50 through 64 years receiving a colorectal cancer screening increased continuously by 6 percentage points.

Table 13. Percentage of Enrollees in HealthChoice Receiving a Screening for Colorectal Cancer, CY 2005 – CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
HealthChoice	30.6%	32.3%	34.0%	35.6%	36.6%

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 nearly 25 million American children and adults. (CDC, 2011). In 2007, approximately 740,000 adults and children in Maryland had a history of asthma, of which, about 75,000 were enrolled in Medicaid (DePinto et al, 2010). The purpose of asthma medications is to prevent or reduce airway inflammation and narrowing. If a person's asthma medications are prescribed and used appropriately, asthma-related hospitalizations, ED visits, and missed school and work days decrease (CDC, n.d.d).

Table 14 compares the HealthChoice rate of appropriate medications for people with asthma with the HEDIS Medicaid national average (HealthcareData Company, LLC, 2010). Between CY 2005 and CY 2008, HEDIS included individuals aged 5 through 56 years in this measure. In CY 2009, however, HEDIS restricted the measure to individuals aged 5 through 50 years. Because of the change in the age requirement in CY 2009, a comparison to prior years is not appropriate for this measure. In CY 2009, 91 percent of HealthChoice enrollees aged 5 through 50 years were appropriately prescribed medications for asthma treatment. HealthChoice performed 1 to 2 percentage points above the HEDIS Medicaid national average between CY 2005 and CY 2009.

Table 14. Percentage of HealthChoice Members Aged 5-50 Years with Persistent Asthma who were Appropriately Prescribed Medications Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
	Aged 5-56 Years				Aged 5-50 Years
HealthChoice	87%	88%	89%	90%	91%*
HEDIS Medicaid National Average	86%	87%	87%	89%	89%*

*Due to significant changes in the specifications for the 2010 HEDIS specifications (CY 2009 data), a comparison to prior years is not appropriate.

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. To assess appropriate and timely screening and treatment for adults with diabetes (types 1 and 2), HEDIS includes a composite set of measures, Comprehensive Diabetes Care (CDC). The CDC measures include:

- *HbA1c Screening*: The percentage of enrollees aged 18 through 75 years with diabetes who received at least one Hemoglobin A1c (HbA1c) test during the measurement year.
- *LDL-C Screening*: The percentage of enrollees aged 18 through 75 years with diabetes who received at least one low-density lipoprotein cholesterol (LDL-C) screening. In CY 2005, HEDIS measured LDL-C screenings occurring within a two-year time period. In CY 2006, however, HEDIS reduced the measurement period to one year.
- *Eye Exams*: The percentage of enrollees aged 18 through 75 years with diabetes who received an eye exam for diabetic retinal disease during the measurement year *or* had a negative retinal exam (no evidence of retinopathy) in the year prior to the measurement year.

Table 15 compares HealthChoice with the HEDIS Medicaid national average on the CDC measures for CY 2005 through CY 2009 (HealthcareData Company, LLC, 2010). HealthChoice consistently performed above the HEDIS Medicaid national average on eye exams and LDL-C screening between CY 2005 and CY 2009. HealthChoice performed above the national average on HbA1c screenings in CY 2007. Within the HealthChoice program:

- The percentage of enrollees with diabetes who received an eye exam increased by 12 percentage points during the measurement period.
- The percentage of enrollees with diabetes who received an HbA1c screening decreased by 3 percentage points during the measurement period.

- The percentage of enrollees with diabetes who received an LDL-C screening increased by 1 percentage point between CY 2006 and CY 2009. Because the specifications changed in CY 2006, a comparison to prior years would not be appropriate.

Table 15. Percentage of HealthChoice Members Aged 18–75 Years with Diabetes who had an Eye Exams, HbA1C, and LDL-C Screenings Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009

HEDIS MEASURES	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Eye Exam (Retinal)					
HealthChoice	55%	59%	60%	63%	67%
HEDIS Medicaid National Average	49%	51%	50%	53%	53%
HbA1c Screening					
HealthChoice	80%	78%	79%	78%	77%
HEDIS Medicaid National Average	76%	78%	77%	81%	81%
LDL-C Screening	**2-Year Measurement Period**	**1-Year Measurement Period**			
HealthChoice	84%	74%*	76%	77%	75%
HEDIS Medicaid National Average	81%	71%*	71%	74%	74%

*Due to significant changes in the specifications for the 2007 HEDIS measurement year (CY 2006), a comparison to prior years is not appropriate.

Section III Summary

This section of the report discussed the HealthChoice goal of improving quality and focused on preventive care and care for chronic conditions. Regarding preventive care for children, HealthChoice well-child visit and immunization screening rates increased during the study period and were consistently higher than the HEDIS Medicaid national average. However, the EPSDT record review shows that provider compliance decreased during the evaluation period, suggesting that this is an area requiring improvement. Regarding preventive care for adults, rates of cervical and breast cancer screening improved during the study period. In CY 2008, the cervical cancer screening rate exceeded the HEDIS Medicaid national average, while the breast cancer screening rate fell below the average in the same year. Colorectal cancer screening rates improved during the study period, but remained low. This section also examined the quality of care for chronic conditions, namely diabetes and asthma. The percentage of enrollees receiving appropriate asthma medications improved during the evaluation period, and HealthChoice performed above the HEDIS Medicaid national average. For enrollees with diabetes, rates of eye exams steadily improved during the evaluation period and were consistently higher than the HEDIS Medicaid national average. The HbA1c and LDL-C screening rates, however, decreased slightly between CY 2008 and CY 2009.

Section IV. Special Topics

This section of the report discusses several special topics, including services provided under the dental and mental health carve-outs, 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 and ethnic minorities.

Dental Services

EPSDT mandates dental care coverage for children younger than 21 years. Children enrolled in Maryland Medicaid, however, historically utilized these services at a low rate. Before Maryland implemented the HealthChoice program in 1997, only 14 percent of Maryland children enrolled in Medicaid for any period of time received at least one dental service, which was below the national average of 21 percent.[6]

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.[7] Key recommendations from the report included increased reimbursement for Medicaid dental services and the institution of a single dental ASO. The reforms recommended by the DAC have been supported and, to a great degree, 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 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 August

[6] Academy of Pediatrics State Medicaid Report for Federal FY 1996 - Analysis of HCFA National Data for Medicaid Children's Dental Services Utilization.
[7] Dental Action Committee. (2007).Access to Dental Services for Medicaid Children in Maryland. http://www.fha.state.md.us/pdf/oralhealth/DAC_Final_Report.pdf

2011, 347 providers have been trained and enrolled with DentaQuest to provide fluoride varnish.

- Permitting public health program-employed 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 allows public health dental hygienists to provide services outside of a dental office, e.g., in schools and Head Start centers.[8]

DHMH continually monitors a variety of measures of dental service utilization, published in the *Annual Oral Health Legislative Report*. One of the measures in this report is closely modeled on the HEDIS measure for Medicaid children's dental service utilization. The HEDIS measure counts the number of individuals receiving dental services based on two criteria: 1) an age range from 2 through 21 years; and 2) Medicaid enrollment of at least 320 days. DHMH modified the measure to include children aged 4 through 20 years. The dental service utilization rate increased by 46 percent between CY 2005 and CY 2010 (Table 16). 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 Dental Services, CY 2005 – CY 2010

	Total Number of Enrollees	Enrollees Receiving One or More Dental Service	Percentage Receiving Service	HEDIS Medicaid National Average*
CY 2005	267,633	117,473	43.9%	41.0%
CY 2006	267,376	117,532	44.0%	42.5%
CY 2007	263,742	130,112	49.3%	43.5%
CY 2008	278,063	149,673	53.8%	44.2%
CY 2009	304,907	184,563	60.5%	45.7%
CY 2010	335,214	214,265	63.9%	47.8%

*HEDIS Medicaid national average is for children aged 2 – 21 years.

Under a 1998 state law, dental care is a mandated benefit for pregnant women. Table 17 presents the percentage of pregnant women aged 21 years and older who received at least one dental service between CY 2005 and CY 2010. During that time period, dental service utilization increased from 14.5 percent in CY 2005 to 25.0 percent in CY 2010. Despite these improvements, dental service utilization by pregnant women remains low. The new dental ASO is addressing this issue.

[8] Maryland Department of Health and Mental Hygiene (December 2010). *Maryland's 2010 Annual Oral Health Legislative Report.* Baltimore, MD.

Table 17. Percentage of Pregnant Women Aged 21+ Years in Medicaid (Enrolled for at Least 90 Days) Receiving Dental Services, CY 2005 – CY 2010

	Total Number of Enrollees	Enrollees Receiving One or More Dental Service	Percentage Receiving Service
CY 2005	23,088	3,354	14.5%
CY 2006	34,480	4,395	12.7%
CY 2007	35,444	5,072	14.3%
CY 2008	36,458	6,272	17.2%
CY 2009	37,206	8,871	23.8%
CY 2010	40,206	10,060	25.0%

Mental Health Services

HealthChoice enrollees in need of specialty mental health services are referred to Maryland's Public Mental Health System but continue to receive medically necessary somatic care through their MCO. The Public Mental Health System provides psychiatric rehabilitation program (PRP) services, which are a collection of supports to individuals that aid in the transition between a serious illness episode (e.g., an inpatient stay) and return to optimal functioning in the community. PRP services provide either general or intense support services in a non-residential setting. General support services offer face-to-face visits with a staff person, at least once a week, and on-call staff are available to the consumer 24 hours a day and 7 days a week. In contrast, intensive support services offer face-to-face interaction with staff at least 40 hours a week, and a treatment provider is on call 24 hours a day and 7 days a week. A PRP may include enrollment in a residential rehabilitation program.

Approximately 2 percent of the HealthChoice population utilizes PRP services. DHMH monitors these enrollees to ensure that they have access to somatic care through their MCOs, especially as this population tends to be sicker than the general HealthChoice population. Table 18 displays the percentage of PRP enrollees with 12 months enrollment who received an MCO ambulatory care visit. This rate increased from 82 percent in CY 2005 to 87 percent in CY 2009.

Table 18. Percentage of PRP Enrollees with at Least One MCO Ambulatory Care Visit and One Outpatient ED Visit, CY 2005 – CY 2009

Calendar Year	Number of PRP Enrollees (12 Months of Enrollment)	Number of PRP Enrollees (12 Months of Enrollment) with an MCO Ambulatory Care Visit	Percentage of PRP Enrollees (12 Months of Enrollment) with an MCO Ambulatory Care Visit
CY 2005	4,777	3,918	82.0%
CY 2006	4,964	4,154	83.7%
CY 2007	4,892	4,143	84.7%
CY 2008	5,082	4,292	84.5%
CY 2009	6,386	5,554	87.0%

Access to Care for Children in Foster Care

This section examines service utilization for children in foster care with any period of enrollment in HealthChoice during the calendar year. The section also compares service utilization for children in foster care with other HealthChoice children. Unless otherwise stated, all of the measures presented include children aged 0 through 20 years and include their use of FFS and MCO services.

Figure 10 compares the ambulatory care visit rate for children in foster care to the rate for other children enrolled in HealthChoice in CY 2009. Overall, 75 percent of children in foster care and 79 percent of other HealthChoice children received at least one ambulatory care visit. For the youngest age groups, children in foster care accessed ambulatory care services at higher rates than other children in the HealthChoice program. For older age groups, children in foster care accessed services at lower rates than other HealthChoice children.

Figure 10. Percentage of Children in Foster Care vs. HealthChoice (Non-Foster) Children Receiving an Ambulatory Care Visit by Age Group, CY 2009

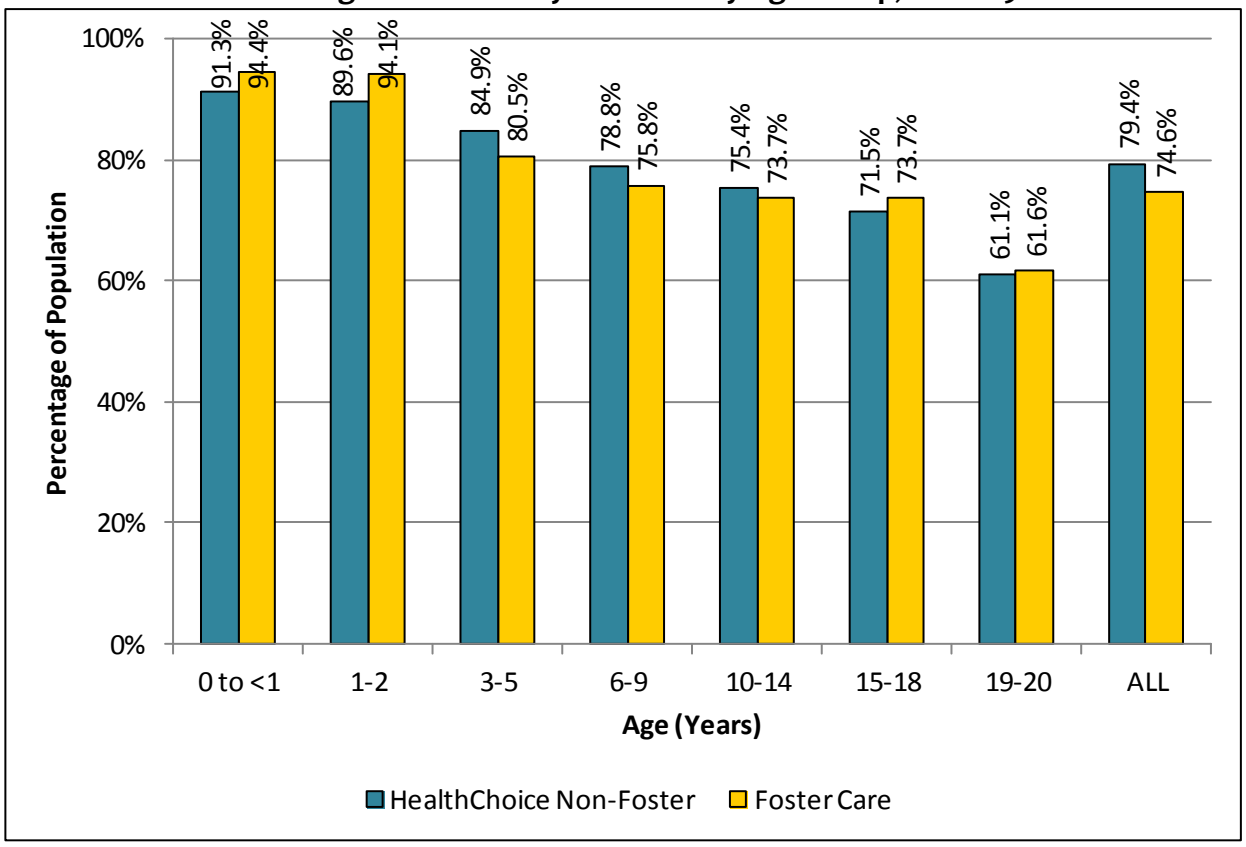


Figure 11 compares the MCO outpatient ED visit rate for children in foster care to the rate for other children enrolled in HealthChoice. In CY 2009, children in foster care and other HealthChoice children had a similar ED utilization rate, about 30 percent. Foster children aged 0 to less than 1 year and 15 through 20 years accessed outpatient ED services at higher rates than other children in the HealthChoice population.

Figure 11. Percentage of Children in Foster Care vs. HealthChoice (Non-Foster) Children Receiving an MCO Outpatient ED Visit by Age Group, CY 2009

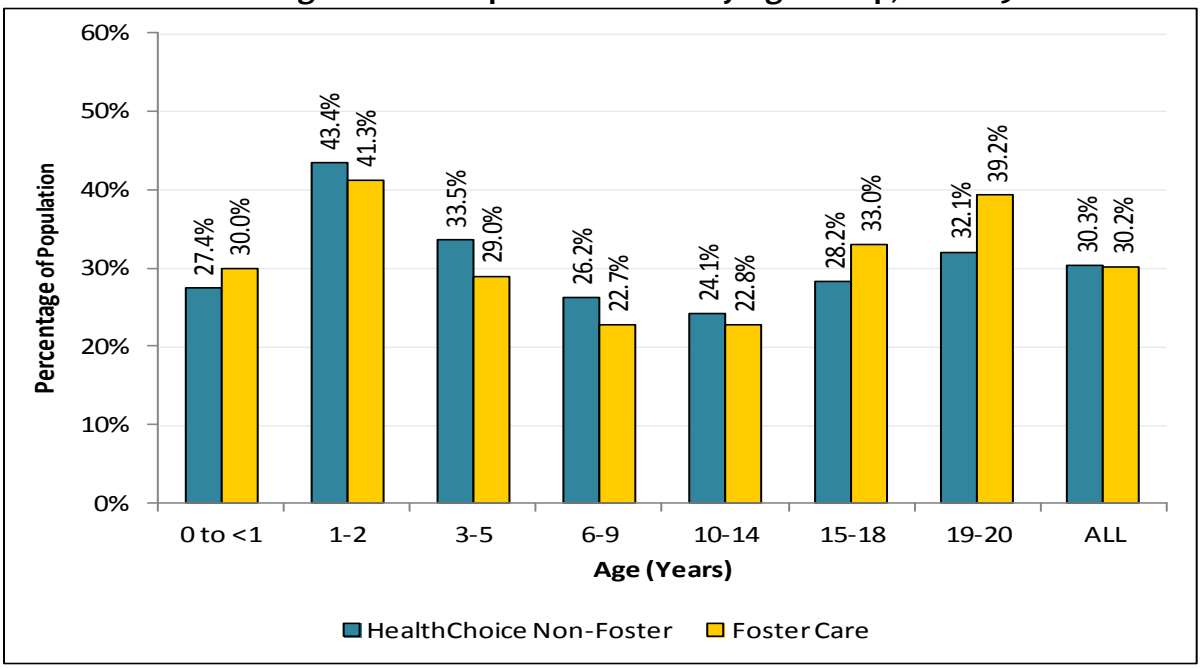
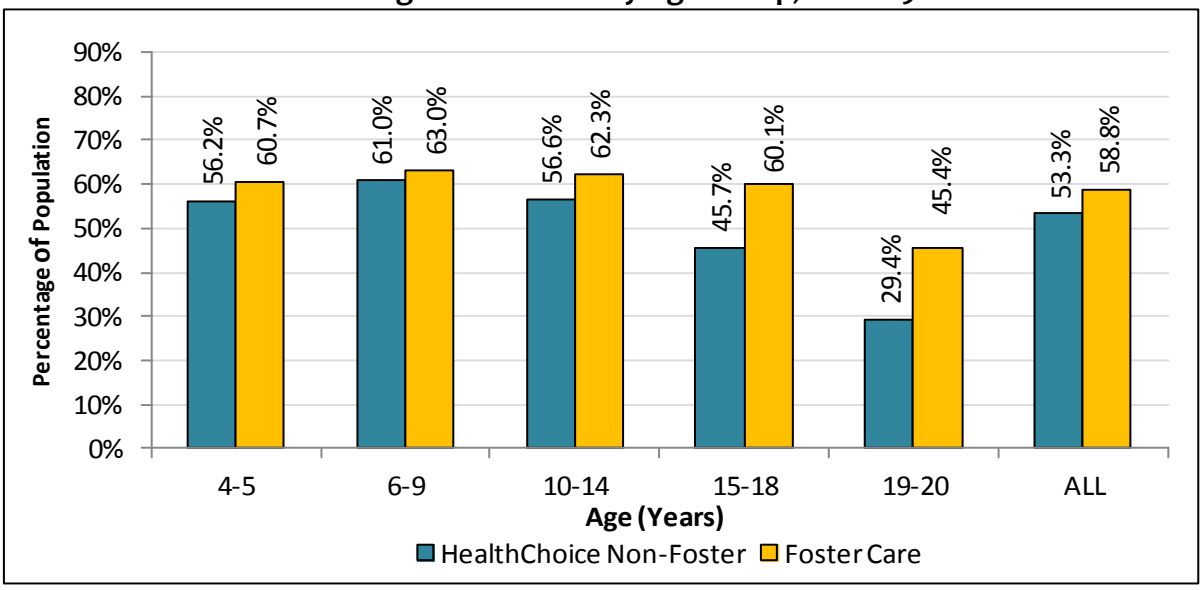


Figure 12 compares the dental utilization rate for foster children with other children in HealthChoice in CY 2009. Children in foster care had a higher dental visit rate than other HealthChoice children across all age groups.

Figure 12. Percentage of Children in Foster Care vs. HealthChoice (Non-Foster) Children Receiving a Dental Visit by Age Group, CY 2009



Reproductive Health

This section of the report focuses on reproductive health services provided under HealthChoice. HEDIS prenatal measures are presented first, followed by measures related to gestational diabetes. A discussion of the Family Planning Program concludes this section.

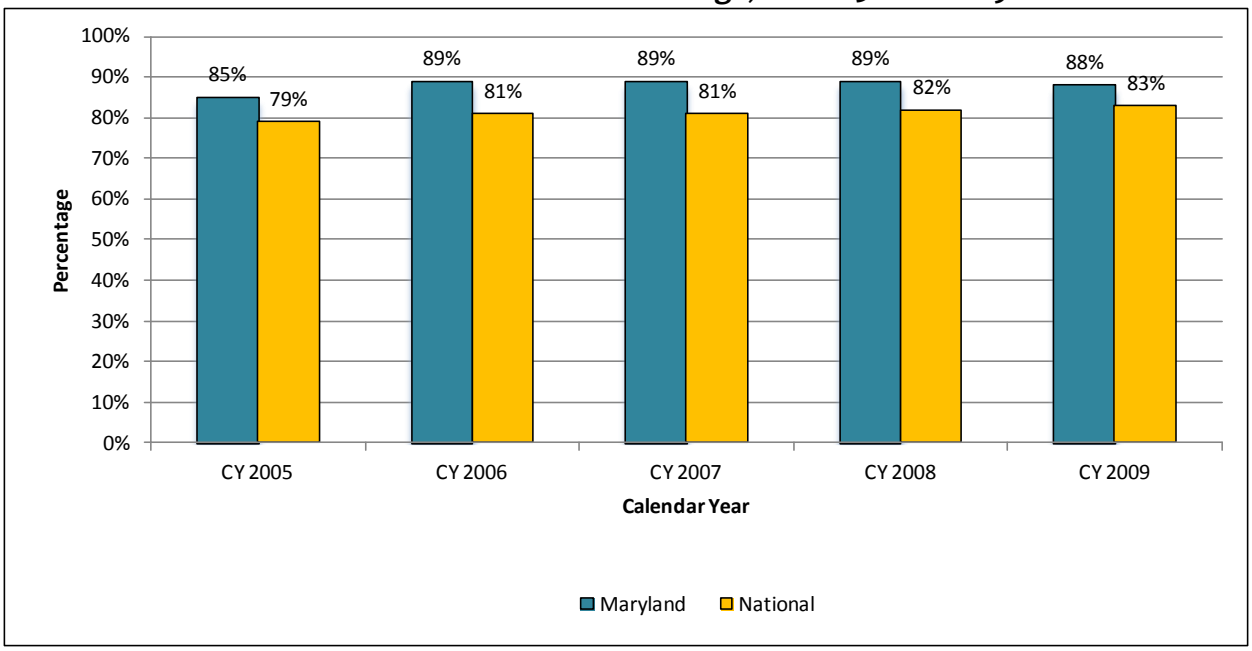
Timeliness of Ongoing Prenatal Care

HEDIS measures the timeliness of prenatal care and the frequency of ongoing prenatal care to determine the adequacy of care during pregnancy. The earlier a woman enters prenatal care, the more likely that health conditions that could affect her health or the health of the newborn might be identified and managed.

Timeliness of care considers the percentage of deliveries for which the mother received a prenatal care visit in the first trimester *or* within 42 days of enrollment.[9] Figure 13 compares HealthChoice performance on this measure with the national HEDIS Medicaid average for CY 2005 through CY 2009 (HealthcareData Company, LLC, 2010). HealthChoice enrollee utilization of prenatal care remained relatively stable between CY 2005 and CY 2009, at approximately 88 percent. HealthChoice consistently outperformed the HEDIS Medicaid national average during the study period, by 5 to 9 percentage points.

[9] HEDIS requires continuous enrollment 43 days prior to and 56 days after delivery.

Figure 13. HEDIS Timeliness of Prenatal Care, Maryland Compared with the National HEDIS Medicaid Average, CY 2005 – CY 2009



Frequency of Ongoing Prenatal Care

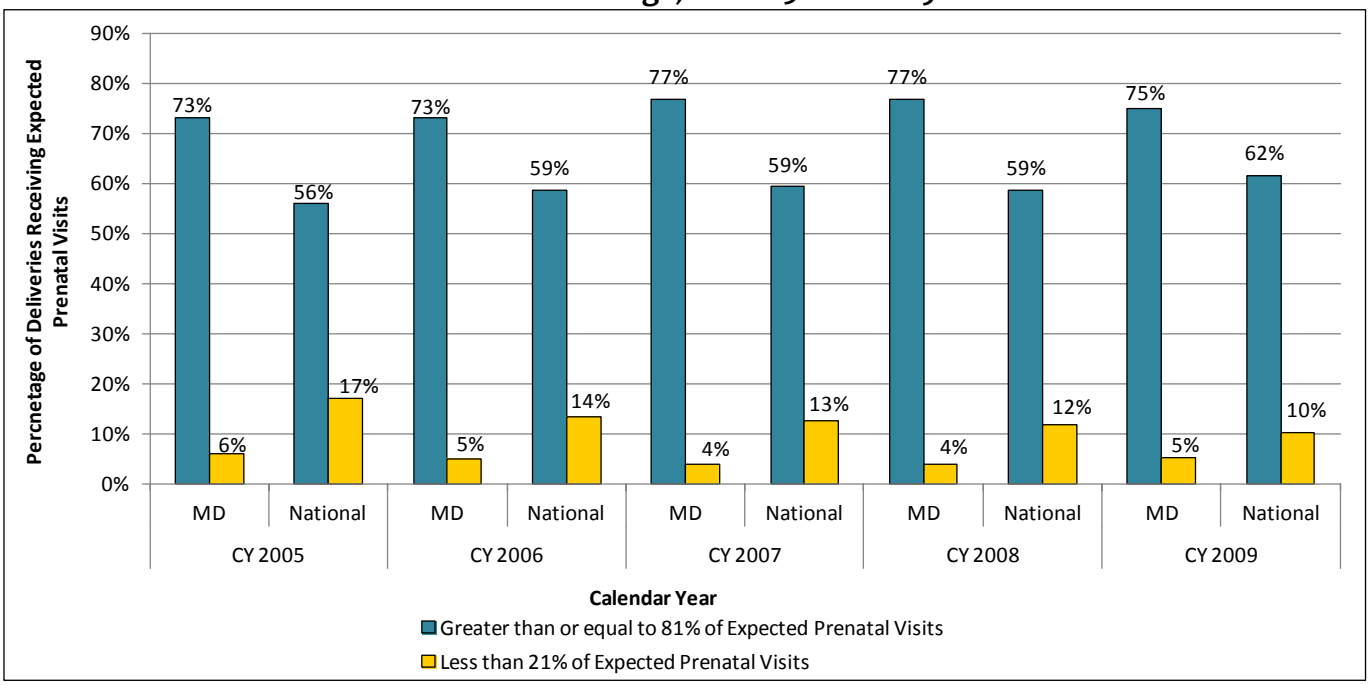
The frequency of ongoing prenatal care measure considers the percentage of recommended[10] prenatal visits received. DHMH uses this measure to assess MCO performance in providing appropriate prenatal care. The measure calculates the percentage of deliveries that received the expected number of prenatal 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 that received more than 80 percent of expected visits; therefore, a higher score is preferable. This rate increased from 73 percent in CY 2005 to 75 percent in CY 2009 (Figure 14) (HealthcareData Company, LLC, 2010). The second aspect of this measure assesses the percentage of women that received less than 21 percent of expected visits; therefore, a lower score is preferable. The percentage of women receiving less than 21 percent of expected visits improved, decreasing from 6 percent in CY 2005 to 5 percent in CY 2009. In sum, both measures show an improvements in access to

[10] According to the American College of Obstetricians and Gynecologists, the recommended numbers of visits are once every four 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. This totals to about 13 to 15 visits.

prenatal care, and Maryland outperformed the HEDIS Medicaid national average in both instances.

Figure 14. Percentage of Deliveries Receiving the Expected Number of Prenatal Visits ≥ 81 Percent or < 21 Percent of Recommended Visits, Maryland Compared with the HEDIS Medicaid National Average, CY 2005 – CY 2009



Gestational Diabetes

When diabetes occurs only during pregnancy and resolves after delivery of the infant, it is called gestational diabetes (National Diabetes Information Clearinghouse, n.d.). Research shows that women who experience gestational diabetes are more likely to develop diabetes later in life than women who do not (National Diabetes Information Clearinghouse, n.d.)). In addition, infants born to mothers with gestational diabetes are often larger, creating difficulties in the delivery process (National Diabetes Information Clearinghouse, n.d.). If there is poor maternal glucose control during pregnancy, there can be temporary glucose control problems for the newborn, as well as an increased risk that the newborn also will develop diabetes later in life (National Diabetes Information Clearinghouse, n.d.).

Figure 15 presents the percentage of pregnant women in HealthChoice with gestational diabetes. Between CY 2005 and CY 2009, the percentage of pregnant women with gestational diabetes increased from 4.6 percent to 6.0 percent.

Figure 15. Percentage of Pregnant Women in HealthChoice with Gestational Diabetes, CY 2005 - CY 2009

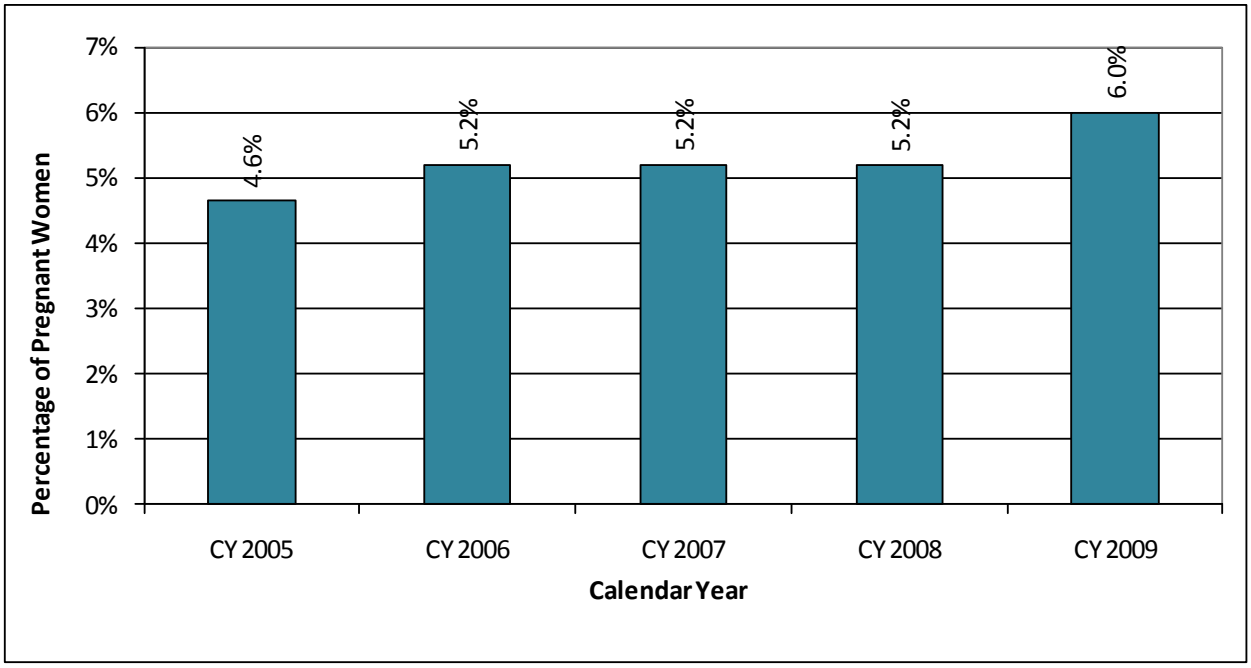


Table 19 compares pregnant women in HealthChoice with and without gestational diabetes on three measures:

- The percentage who received at least one ambulatory care visit
- The percentage with an outpatient ED visit
- The percentage of women with an outpatient ED visit who also had an ambulatory care visit

Between CY 2005 and CY 2009, pregnant women with gestational diabetes were more likely than other pregnant women to receive an ambulatory care visit and to visit the ED. Ambulatory care and ED utilization increased for both groups during the measurement period. Pregnant women with gestational diabetes who had an ED visit had a higher ambulatory care visit rate compared to pregnant women without gestational diabetes.

Table 19. Percentage of Pregnant HealthChoice Women with at Least One MCO Ambulatory Care or Outpatient ED Visit by Gestational Diabetes Status, CY 2005 and CY 2009

	With Gestational Diabetes	Without Gestational Diabetes	ALL	With Gestational Diabetes	Without Gestational Diabetes	ALL
% of Pregnant Women	**CY 2005**			**CY 2009**		
With MCO Ambulatory Care Visit	94.4%	76.9%	77.8%	95.7%	82.5%	83.3%
With MCO Outpatient ED Visit	33.7%	27.0%	27.3%	39.8%	36.0%	36.2%
With MCO Outpatient ED and Ambulatory Care Visit	97.6%	91.4%	91.7%	98.1%	93.7%	94.0%

The Family Planning Program

The Family Planning Program provides family planning office visits –which include physical examinations, certain laboratory services, family planning supplies, reproductive education, counseling and referral, and permanent sterilization services – to women who are not eligible for Medicaid. Eligibility for the Family Planning Program was expanded in 2012 to cover all women with household income below 200 percent of the FPL who do not qualify for full-benefit Medicaid.

Tables 20 and 21 present the percentage of total Medicaid enrollees in the Family Planning Program and the percentage of Family Planning enrollees that received at least one service between CY 2005 and CY 2009. 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 for a full 12 months.

The number of women with any period of enrollment in the Family Planning Program decreased by 47.5 percent between CY 2005 and CY 2009 (Table 20). This decline in enrollment may be attributable 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, reduce the upper income limit from 250 percent of the FPL to 200 percent of the FPL, and to no longer enroll women with other third party insurance that included family planning benefits. The July 2008 Medicaid expansion also increased the number of women who continue to be eligible for full Medicaid coverage after delivery, thus decreasing the number of women enrolled in the limited benefit Family Planning Program. Table 20 shows that during the evaluation period, the percentage of individuals with any period of enrollment in the program who utilized at least one family planning service remained between 24 and 30 percent. As displayed in Table 21, when looking at those women enrolled in the Program in CY 2009 for the entire 12 months, the rate increases from 30 percent to 37 percent.

Table 20. Percentage of Family Planning Enrollees (Any Period of Enrollment) with at least One Corresponding Service, CY 2005 - CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Number of Enrollees	72,640	69,862	62,477	52,109	38,149
Number with at least 1 Service	17,356	19,224	18,590	15,697	11,223
Percent with at least 1 Service	23.9%	27.5%	29.8%	30.1%	29.4%

Table 21. Percentage of Family Planning Enrollees (12-Month Enrollment) with at least One Corresponding Service, CY 2005 - CY 2009

	CY 2005	CY 2006	CY 2007	CY 2008	CY 2009
Number of Enrollees	37,830	30,022	21,250	14,757	7,447
Number with at least 1 Service	9,101	8,675	7,108	5,406	2,786
Percent with at least 1 Service	24.1%	28.9%	33.4%	36.6%	37.4%

Services for Individuals with HIV/AIDS

DHMH continuously monitors service utilization for HealthChoice enrollees with HIV/AIDS. This section of the report presents the enrollment distribution of HealthChoice enrollees with HIV/AIDS by 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.

The number of HealthChoice enrollees with any period of enrollment identified as having HIV/AIDS using the capitation payment rate cells decreased from 2,988 in CY 2005 to 2,455 in CY 2009. Table 22 presents the percentage of enrollees with HIV/AIDS by race/ethnicity for CY 2005 and CY 2009. Across the study period, Blacks and Whites comprised about 95 percent of the HIV/AIDS population, and the Black-to-White ratio was about 8 to 1.

Table 22. HealthChoice Enrollees (Any Period Enrollment) with HIV/AIDS by Race/Ethnicity, CY 2005 and CY 2009

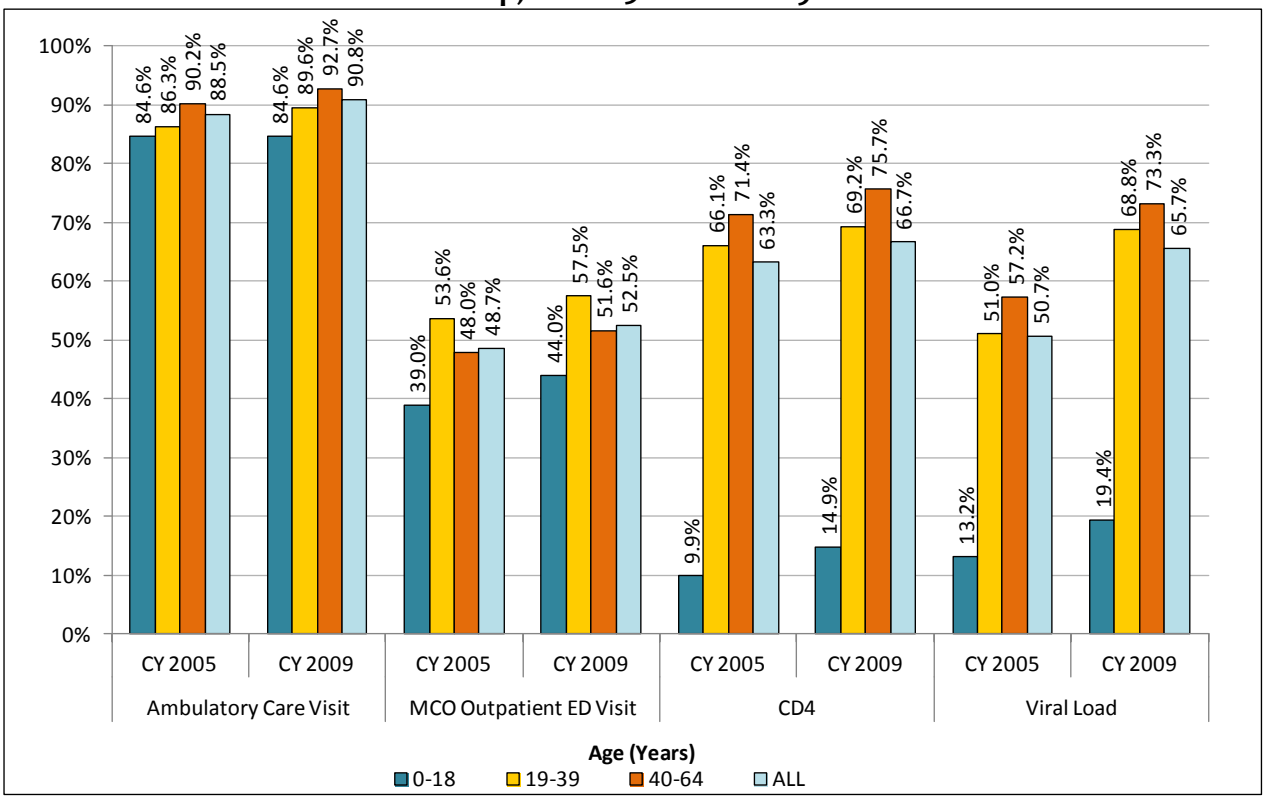
	CY 2005	CY 2009
Race/Ethnicity	**Percent**	**Percent**
Black	85.8%	84.9%
Asian	0.2%	0.2%
White	10.1%	10.9%
Hispanic	0.9%	0.9%
Other	2.8%	3.1%
ALL	**100%**	**100%**

Figure 16 shows service utilization by enrollees with HIV/AIDS in CY 2005 and CY 2009 by age group. The overall percentage of HIV/AIDS enrollees with an ambulatory care visit increased from 88.5 percent in CY 2005 to 90.8 percent in CY 2009. Ambulatory care utilization increased for all age groups, except children aged 0 through 18 years. Similarly, the percentage of enrollees with an outpatient ED visit increased by 3.8 percentage points during the study period. This rate increased for all age groups.

Figure 16 also presents the percentage of individuals with HIV/AIDS that received CD4 testing in CY 2005 and CY 2009. The overall rate increased from 63.3 percent in CY 2005 to 66.7 percent in CY 2009. Individuals aged 40 through 64 years had the highest rates of CD4 testing during the study period. Individuals aged 0 to 18 years demonstrated the largest increase in CD4 testing rates, 5 percentage points.

Finally, Figure 16 presents the percentage of individuals with HIV/AIDS that received a viral load testing during the study period. This measure increased from 50.7 percent in CY 2005 to 65.7 percent in CY 2009. Individuals aged 19 through 39 and 40 through 64 showed the largest increase in utilization, 17.8 percentage points and 16.1 percentage points, respectively.

Figure 16. Percentage of HealthChoice Enrollees with HIV/AIDS who Received an Ambulatory Care Visit, MCO Outpatient ED Visit, CD4 Testing, and Viral Load Testing by Age Group, CY 2005 and CY 2009



REM Program

The REM program provides case management services to Medicaid enrollees who have one of a specified list of rare and expensive medical conditions and who require sub-specialty care. In order 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 enrollees 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 services, and adult dental services. This section of the report presents data on REM enrollment and service utilization.

REM Enrollment

Table 23 presents REM enrollment by age group and sex for CY 2005 and CY 2009. In both years, the majority of REM enrollees were children aged 0 through 18 years (approximately 75 percent) and male (approximately 55 percent). The gender distribution differs from the HealthChoice population, which has a higher percentage of females (56 percent in CY 2009).

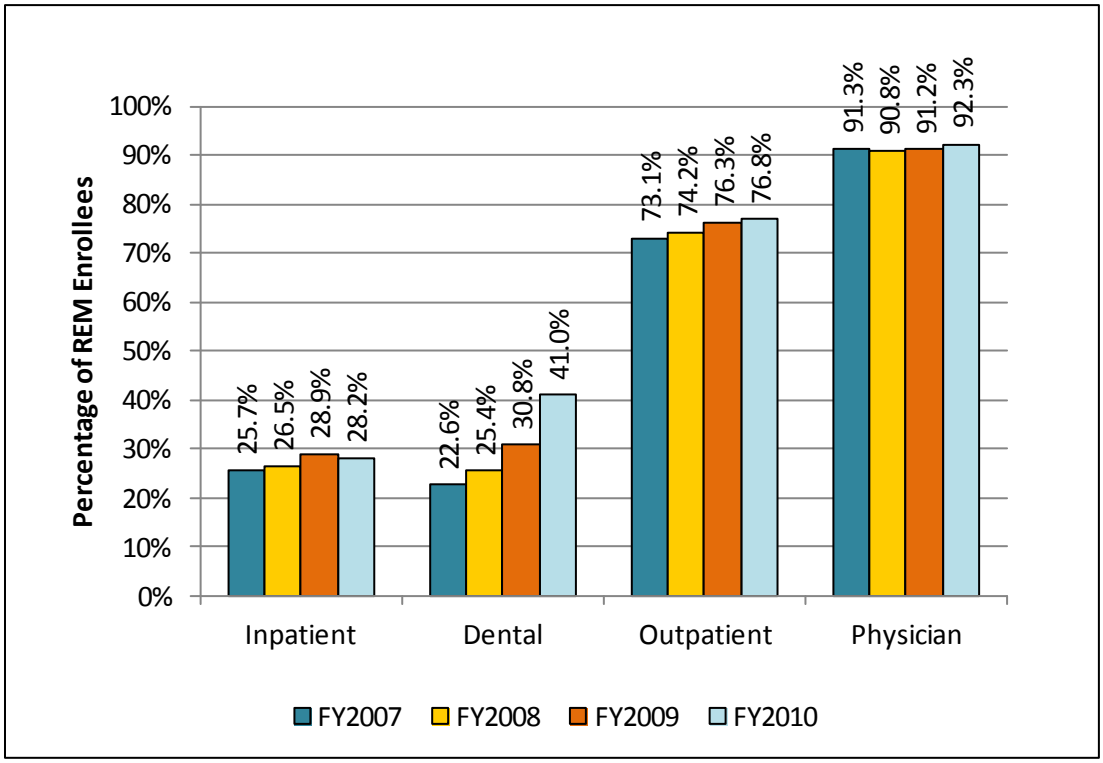
Table 23. REM Enrollments by Age Group and Sex, CY 2005 and CY 2009

	CY 2005		CY 2009	
Age Group (Years)	**Number of Enrollees**	**Percent of Total**	**Number of Enrollees**	**Percent of Total**
0-18	2,982	76.2%	3,056	72.9%
19-64	932	23.8%	1,135	27.1%
Total	**3,914**	**100.0%**	**4,191**	**100.0%**
Female	1,780	45.5%	1,855	44.3%
Male	2,134	54.5%	2,336	55.7%
Total	**3,914**	**100.0%**	**4,191**	**100.0%**

REM Service Utilization

Figure 17 presents the percentage of REM enrollees who received at least one inpatient, dental, outpatient, or physician visit between fiscal year (FY) 2007 and FY 2010. These measures serve as an indicator of access to care. The percentage of enrollees with a dental visit increased markedly during the study period, from 22.6 percent in FY 2007 to 41.0 percent in FY 2010. At the same time, inpatient, outpatient, and physician service utilization increased slightly.

Figure 17.Percentage of REM Enrollees with at least One Inpatient, Dental, Outpatient, and Physician Visit, FY 2007-FY2010



Racial/Ethnic Disparities

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

Enrollment

Table 24 displays HealthChoice enrollment by race/ethnicity. Enrollment increased within each racial/ethnic group between CY 2005 and CY 2010. However, this growth did not occur uniformly across all categories: new enrollees were disproportionately from the Hispanic, Asian, and Other[11] groups. The Asian and Hispanic racial/ethnic categories increased by 74 percent and 69 percent, respectively. The "Other" category experienced the most growth, increasing by 105

[11] The Other racial/ethnic category includes Native American, Pacific Islands/Alaskan, and enrollees with no designated race

percent. The percentage of enrollees in the Black category decreased from 55.3 percent in CY 2005 to 50.2 percent in CY 2010, while the percentage of enrollees in the White category remained at 29 percent.

Table 24. HealthChoice Enrollment by Race/Ethnicity, CY 2005 and CY 2010

	CY 2005		CY 2010	
	Number of Enrollees	Percent	Number of Enrollees	Percent
Asian	14,731	2.4%	25,617	3.1%
Black	341,491	55.3%	417,707	50.2%
White	179,783	29.1%	243,630	29.3%
Hispanic	58,179	9.4%	98,514	11.8%
Other	23,007	3.7%	47,216	5.7%
Total	**617,191**	**100.0%**	**832,684**	**100.0%**

Ambulatory Care Visits

Figure 18 shows the percentage of children aged 0 through 20 years who received at least one ambulatory care visit across all racial/ethnic groups during the study period. This rate increased for all racial/ethnic groups during the study period. Hispanics had the highest rate in both CY 2005 (82.0 percent) and CY 2009 (87.3 percent) and Blacks had the lowest rate across the study period.

Figure 18. Percentage of HealthChoice Enrollees Aged 0-20 Years Receiving an Ambulatory Care Visit by Race/Ethnicity, CY 2005 and CY 2009

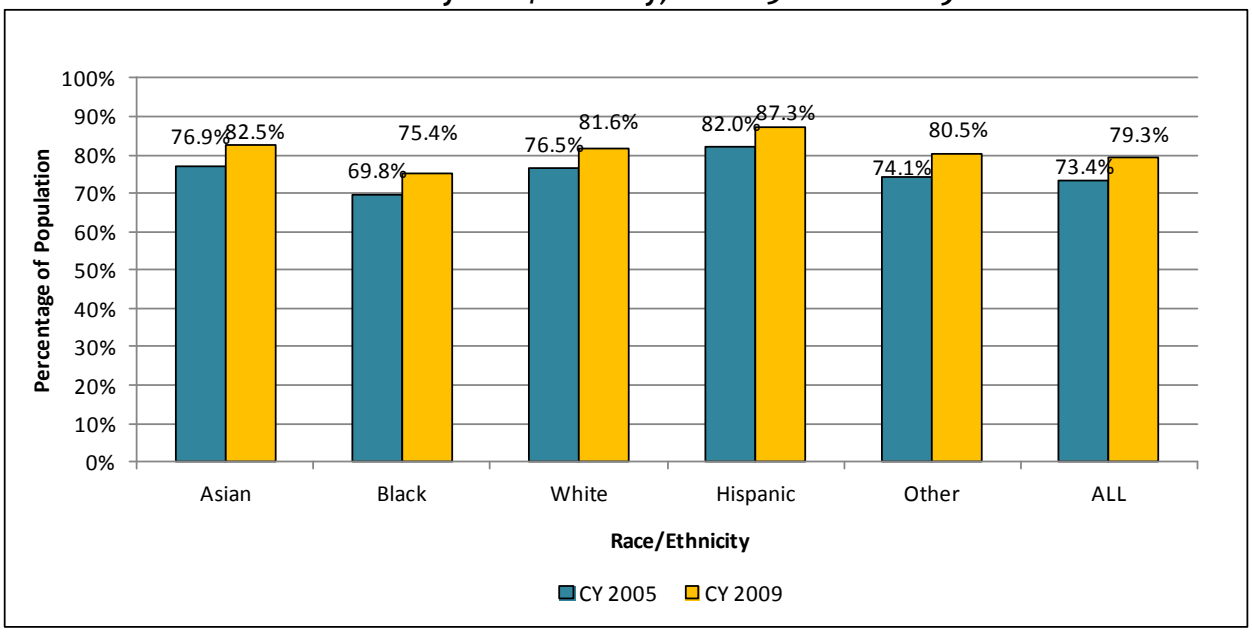
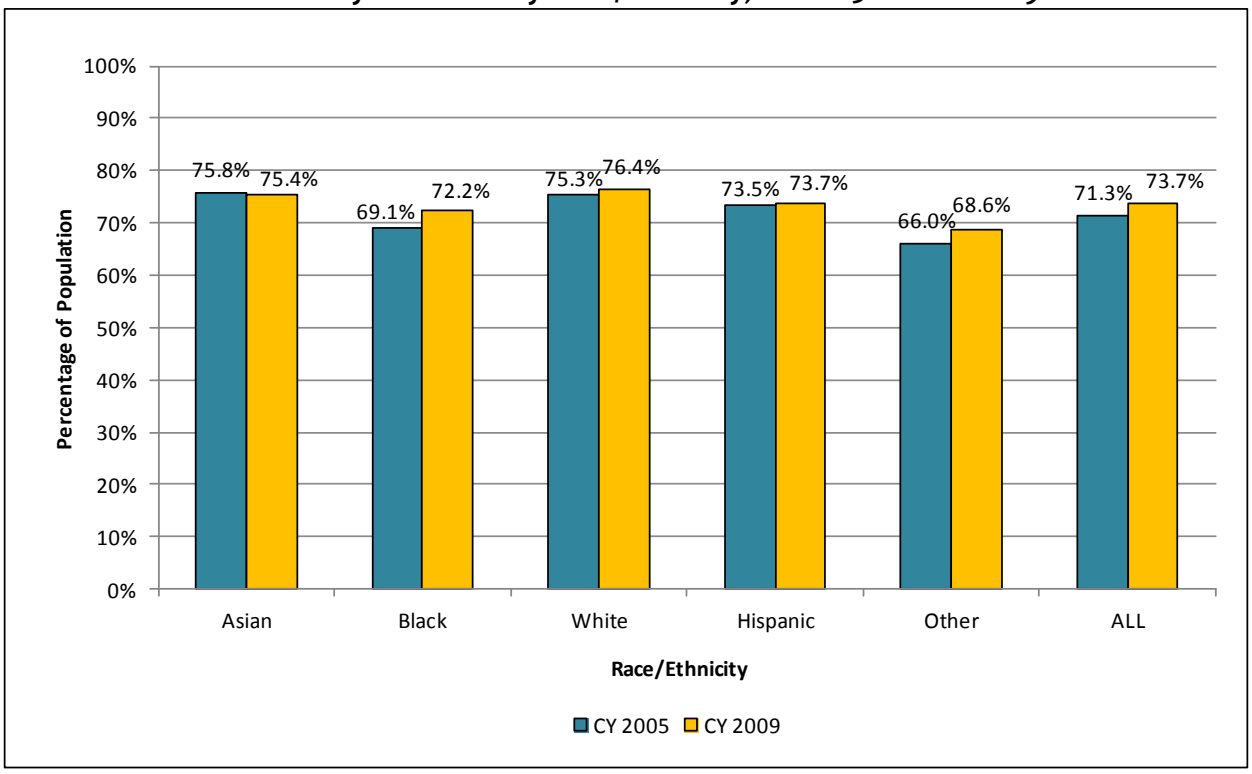


Figure 19 presents the percentage of adults aged 21 through 64 years who received at least one ambulatory care visit in CY 2005 and CY 2009. The ambulatory care visit rate improved for all racial/ethnic groups except Asians. The Black racial/ethnic group experienced the greatest improvement during the study period (3.1 percentage points).

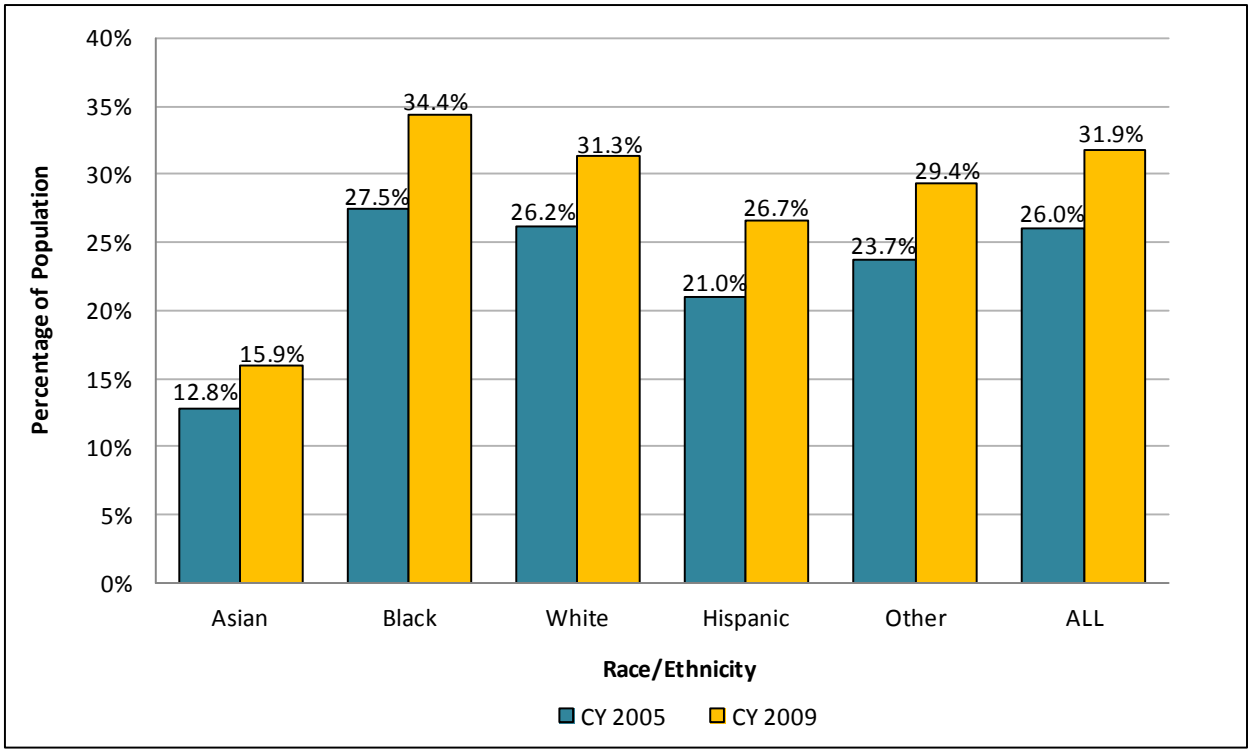
Figure 19. Percentage of HealthChoice Enrollees Aged 21 - 64 Years Receiving an Ambulatory Care Visit by Race/Ethnicity, CY 2005 and CY 2009



ED Visits

Figure 20 displays the percentage of HealthChoice enrollees aged 0 through 64 years who had at least one ED visit by race/ethnicity in CY 2005 and CY 2009. Blacks had the highest ED visit rate, but each racial/ethnic group experienced an increase during the study period. Asians had the lowest increase (3.1percentage points), and Blacks had highest increase (6.9 percentage points).

Figure 20. Percentage of HealthChoice Enrollees Aged 0-64 Receiving an ED Visit by Race/Ethnicity, CY 2005 and CY 2009



Section IV Summary

This section of the report provided an overview of several special HealthChoice initiatives and programs. Some of the highlights of these special topics 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.
- HealthChoice enrollees who access carved-out specialty mental health services are also receiving somatic care services through their MCOs.
- Service utilization by children in foster care is similar to utilization by other children in HealthChoice.
- Measures of access to prenatal care services improved during the study period, and Maryland outperformed the HEDIS Medicaid national average.

- Due to program changes required by CMS, enrollment in the Family Planning Program decreased by nearly 48 percent between CY 2005 and CY 2009 (using the any period of enrollment methodology).
- The REM program provides case management, medically necessary private duty nursing, and other expanded benefits to enrollees who have one of a specified list of rare and expensive medical conditions. The majority of REM enrollees (73 percent) are children and male (56 percent).
- Ambulatory care service utilization, CD4 testing, and viral load testing improved for enrollees with HIV/AIDS during the study period. ED utilization by this population also increased during the study period.
- Regarding racial and ethnic disparities in access to care, Black children 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 ensure a reduction in disparities between racial/ethnic groups.

Section V. PAC Access and Quality

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

- Primary care services, including visits to the doctor or clinic
- Family planning and gynecological services
- Prescriptions
- Certain over-the-counter medications with a doctor'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 services (effective January 1, 2010)

During the 2007 HealthChoice renewal, Maryland received CMS' approval to phase in additional services to the PAC program. Maryland added community-based substance abuse services and outpatient ED services to the PAC benefit package in January 2010. Additionally, enrollees may receive specialty mental health services through the FFS system. As a result of the Affordable Care Act, the PAC program will transition into a categorically-eligible Medicaid population by January 2014. This section of the report analyzes a variety of PAC enrollment and service utilization performance measures.

PAC Enrollment

This section presents PAC enrollment measures. The number of individuals with any period of enrollment in PAC increased by 108 percent during the study period, increasing from 31,278 enrollees in CY 2007 to 64,979 enrollees in CY 2010. Figure 21 presents the percentage of PAC enrollees with any period of enrollment by race/ethnicity for CY 2007 through CY 2010. Across the study period, Blacks and Whites comprised more than 95 percent of the PAC population, with the Black-to-White ratio almost 2 to 1.

Figure 21. PAC Enrollment (Any Period of Enrollment) by Race/Ethnicity, CY 2007 to CY 2010

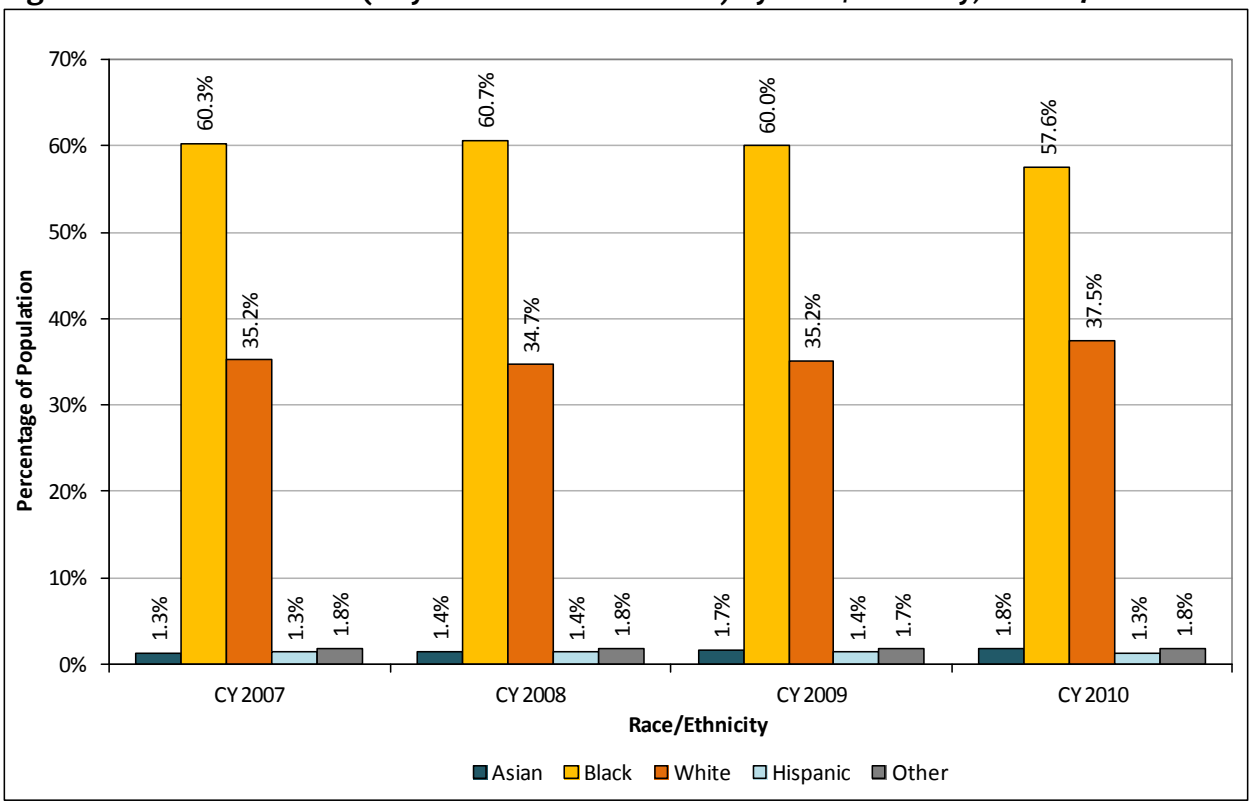
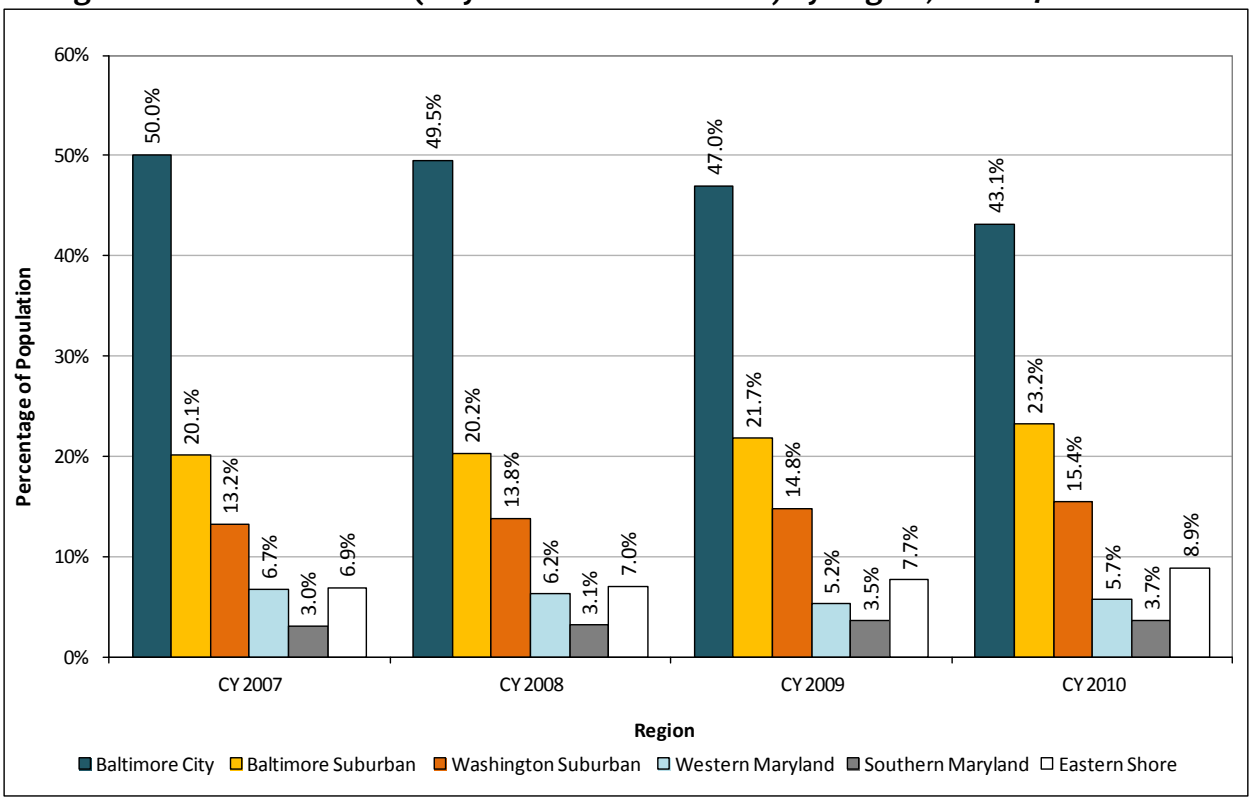


Figure 22 presents PAC enrollment by region for CY 2007 through CY 2010. Enrollment was concentrated in the densely populated areas of the state, with more than 80 percent of PAC enrollees residing in three regions: Baltimore City, Baltimore Suburban, and Washington Suburban.

Figure 22. PAC Enrollment (Any Period of Enrollment) by Region, CY 2007 to CY 2010



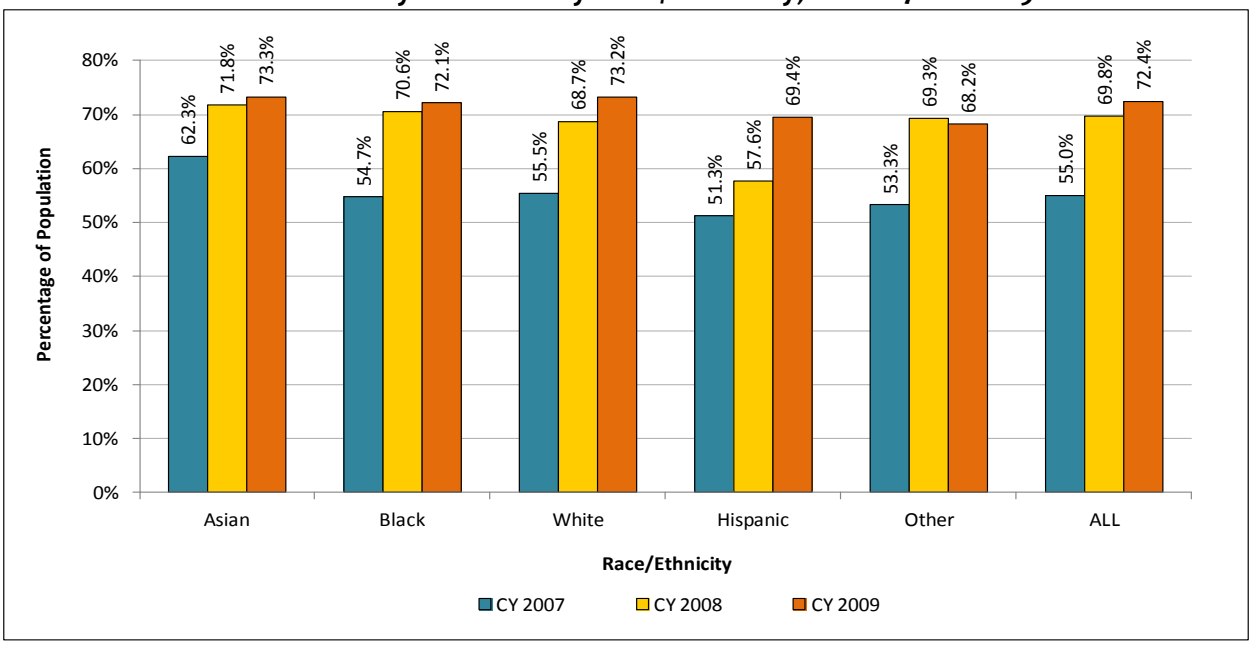
PAC Service Utilization

In order to provide a more complete picture of service utilization for individuals enrolled in the PAC program, this section of the report focuses on PAC service utilization for individuals enrolled in the PAC program for the entire year.

Ambulatory Care Visits

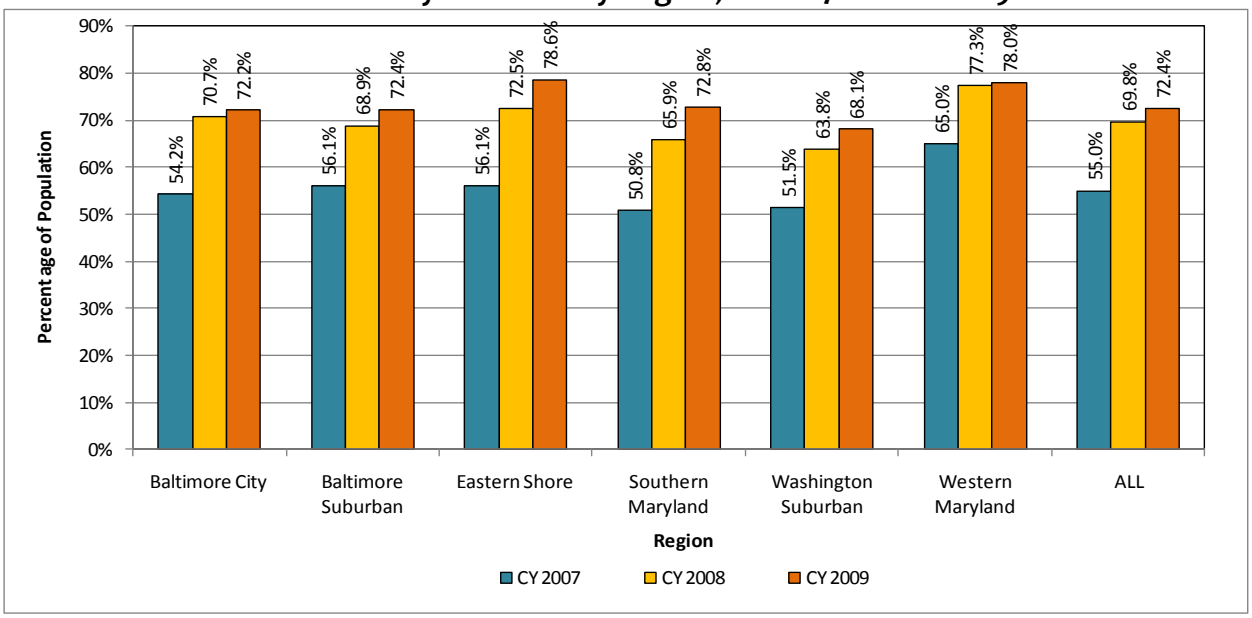
Figure 23 presents the percentage of PAC enrollees with 12 months of enrollment in a PAC MCO who had at least one ambulatory care visit between CY 2007 and CY 2009 by race/ethnicity. Ambulatory care service utilization increased across all racial/ethnic groups between CY 2007 and CY 2009. Overall, the percentage of PAC enrollees with an ambulatory care visit increased by 17.4 percentage points, from 55.0 percent in CY 2007 to 72.4 percent in CY 2009. Black, White, and Hispanic enrollees experienced the greatest increase, over 17 percentage points.

Figure 23. Percentage of PAC Enrollees (12 Months of PAC Enrollment) who Received an Ambulatory Care Visit by Race/ Ethnicity, CY 2007-CY 2009



Shown in Figure 24, the ambulatory care visit rate also increased within each region. The Eastern Shore region experienced the greatest increase –22.5 percentage points– followed by Southern Maryland and Baltimore City –22.0 and 17.9 percentage points, respectively.

Figure 24. Percentage of PAC Enrollees (12 Months of PAC Enrollment) who Received an Ambulatory Care Visit by Region, CY 2007 and CY 2009

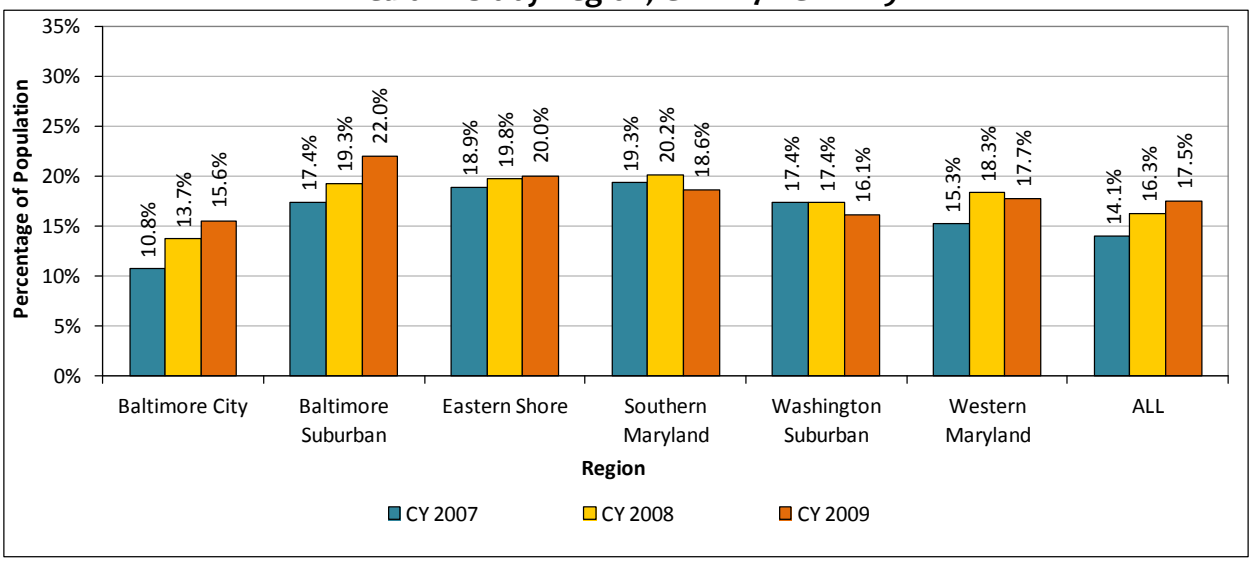


Specialty Mental Health Services

Specialty mental health services are carved out of the PAC MCO benefit package, and an ASO manages these services. Specialty mental health services are defined as any mental health service other than those provided by a PCP and are measured as one visit per provider per person per day.

Figure 25 shows the percentage of individuals with 12 months of enrollment in a PAC MCO who had at least one specialty mental health visit by region between CY 2007 and CY 2009. Overall, the percentage of enrollees accessing these services increased by 3.4 percentage points, from 14.1 percent in CY 2005 to 17.5 percent in CY 2009. This percentage increased in four regions and decreased in three regions.

Figure 25. Percentage of PAC Enrollees (12 Months of Enrollment) with a Specialty Mental Health Visit by Region, CY 2007 - CY 2009



Prescription Drug Use

On July 1, 2006, PAC replaced the Maryland Pharmacy Assistance Program, and the Pharmacy Assistance enrollees were transitioned into PAC. Table 25 presents the percentage of PAC enrollees who filled a prescription during the year by the number of prescriptions filled per person. Prescription drug use varied among PAC enrollees during the study period. The percentage of enrollees that filled at least one prescription increased by 11.4 percentage points, from 69.5 percent in CY 2007 to 79.9 percent in CY 2009.

Table 25. Percentage of PAC Enrollees (12 Months of Enrollment) with a Prescription by Number of Prescriptions, CY 2007 and CY 2009

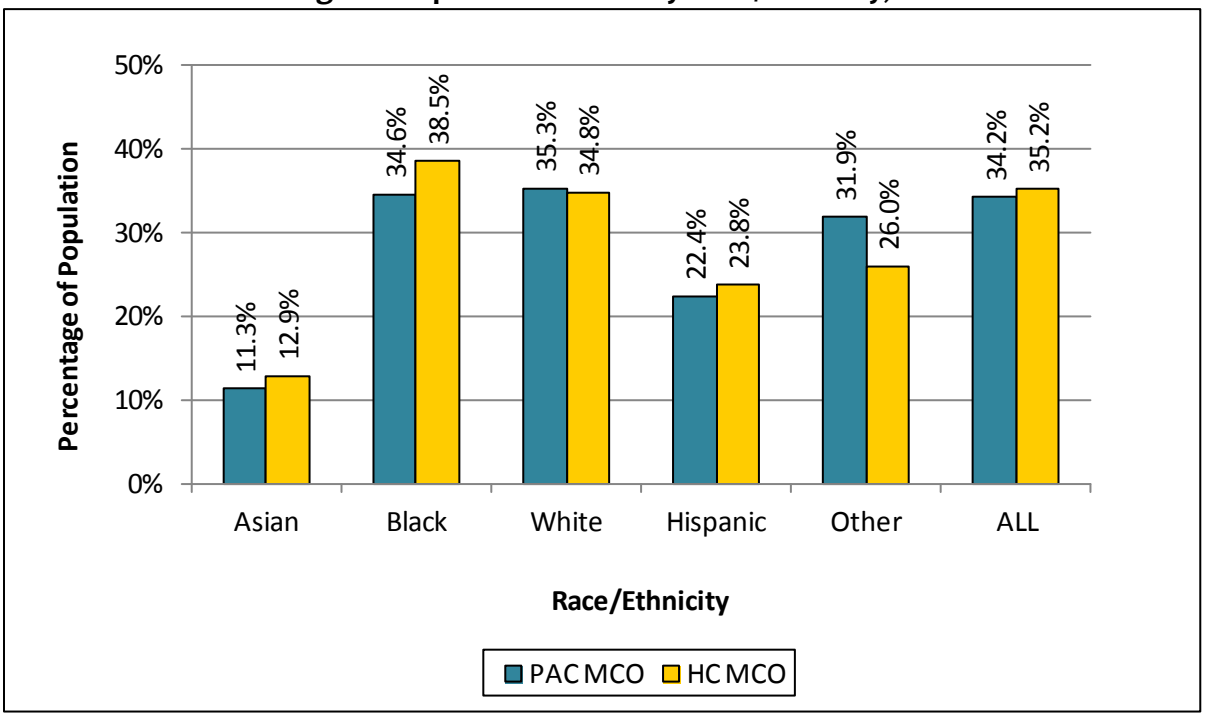
	CY 2007		CY 2008		CY 2009	
Number of Prescriptions	Number of Enrollees	Percent with Prescription	Number of Enrollees	Percent with Prescription	Number of Enrollees	Percent with Prescription
0	5,002	30.5%	2,241	19.8%	2,402	19.1%
1	624	3.8%	420	3.7%	508	4.0%
2	702	4.3%	464	4.1%	519	4.1%
3	486	3.0%	410	3.6%	447	3.5%
4	503	3.1%	351	3.1%	412	3.3%
5-10	1,926	11.8%	1,530	13.6%	1,792	14.2%
11-20	2,160	13.2%	1,783	15.8%	2,008	15.9%
21-30	1,406	8.6%	1,271	11.3%	1,323	10.5%
31-40	1,020	6.2%	863	7.6%	978	7.8%
41-50	756	4.6%	600	5.3%	721	5.7%
51 or More	1,803	11.0%	1,358	12.0%	1,496	11.9%
ALL	**16,388**	**100.0%**	**11,291**	**100.0%**	**12,606**	**100.0%**

ED Visits

On January 1, 2010, Maryland added outpatient ED visits to the PAC benefit package. This section of the report presents a preliminary analysis of ED utilization by PAC enrollees. This analysis is considered preliminary because of insufficient run-out for CY 2010 claims submission as of the publication of this report. This analysis will serve as a baseline for future PAC ED evaluation.

Figure 26 compares the percentage of PAC enrollees who had at least one outpatient ED visit in CY 2010 with the percentage of HealthChoice enrollees aged 19 to 64 years with an ED visit. These data are presented by race/ethnicity. Both PAC and HealthChoice enrollees had similar overall rates of outpatient ED utilization (approximately 35 percent). Among all racial/ethnic groups, Blacks had a higher rate of ED use for both PAC and HealthChoice populations. The racial/ethnic distribution of ED visits was similar across both programs.

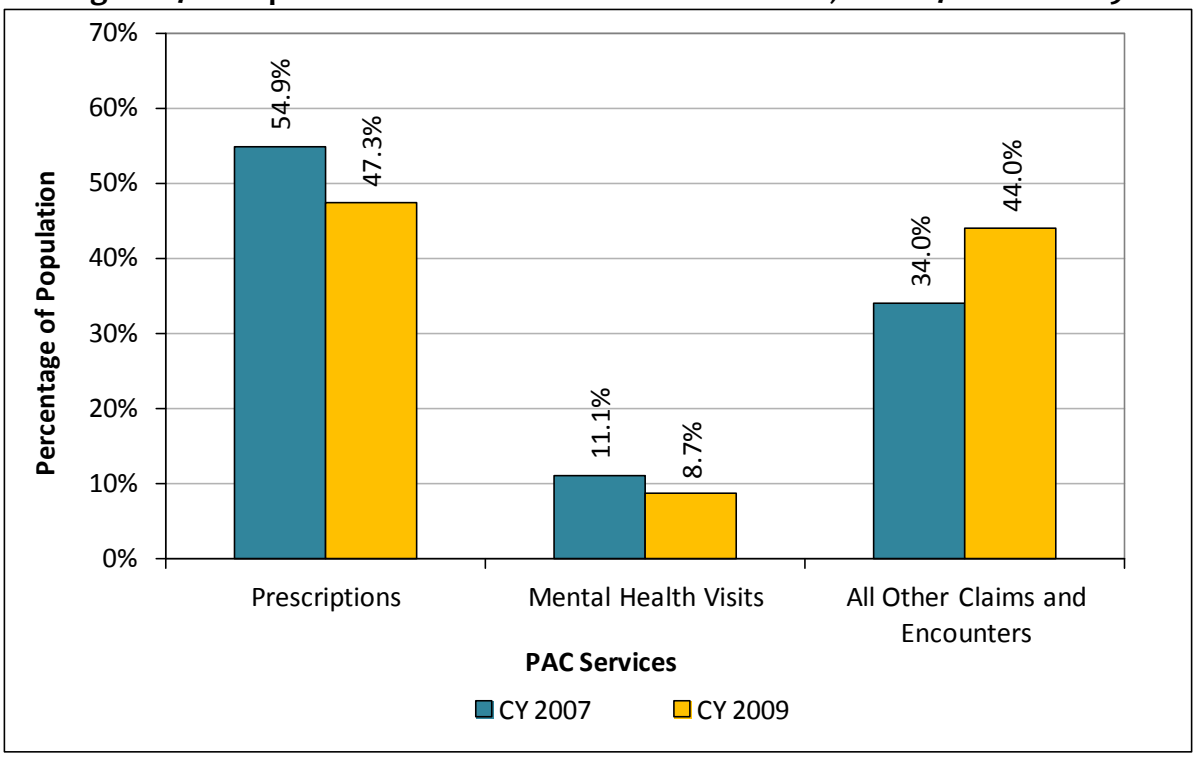
Figure 26. PAC Population vs. HealthChoice Population (Any Period of Enrollment) Receiving an Outpatient ED Visit by Race/Ethnicity, CY 2010



Composition of Total PAC Services

Figure 27 presents the overall composition of services, categorized as prescriptions, mental health, and all other services, provided under the PAC program in CY 2007 and CY 2009. The proportion of prescription services decreased from approximately 55 percent in CY 2007 to 47 percent in CY 2009. Mental health visits accounted for nearly 9 percent of the services in CY 2009, a 2.4 percentage point decrease from CY 2007. All other services increased by 10 percentage points between CY 2007 and CY 2009.

Figure 27. Comparison of Total Services Provided in PAC, CY 2007 and CY 2009



PAC HEDIS Measures

In CY 2008, DHMH began using HEDIS to assess quality and service utilization in the PAC program. The PAC HEDIS measures include breast cancer screening, cervical cancer screening, and comprehensive diabetes care. Table 26 compares the PAC HEDIS measures with the HEDIS Medicaid national average for CY 2008 and CY 2009 (HealthcareData Company LLC, 2011).

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. Overall, 38 percent of women enrolled in PAC received a mammogram in CY 2009, an increase of 6 percentage points over CY 2008.

The cervical cancer screening measures is reported for women aged 21 through 64 years who received a PAP test within a three-year period. The rate increased by 3 percentage points between CY 2008 and CY 2009. It should be noted that this measure examines enrollees' experiences during the measurement year and the two years prior to the measurement year. PAC was not in existence for three years when these measures were conducted, which may explain why the PAC scores are lower than the HEDIS Medicaid national average.

The CDC measure assesses the percentage of enrollees with diabetes (types 1 and 2) who receive HbA1c testing, eye exams, and LDL-C screening. Between CY 2008 and CY 2009, the PAC eye

exam rate increased by 10 percentage points, the HbA1c rate increased by two percentage points, and the LDL-C screening rate remained at 73 percent.

Table 26. PAC HEDIS Measures Compared with the National HEDIS Medical Average, CY 2008–CY 2009

	CY 2008		CY 2009	
HEDIS Measures	**PAC**	**HEDIS Medicaid National Average**	**PAC**	**HEDIS Medicaid National Average**
Breast Cancer Screening	32%	51%	38%	52%
Cervical Cancer Screening	39%	66%	42%	66%
CDC – HBA1c Testing	75%	81%	77%	81%
CDC – Eye Exam	35%	53%	45%	53%
CDC – LDL-C Screening	73%	74%	73%	74%

Section V Summary

PAC is a limited benefit program for adults with low income who are not eligible for Medicare or the full Medicaid benefit package. Overall, PAC enrollment increased by 108 percent during the study period, increasing from 31,278 enrollees in CY 2007 to 64,979 enrollees in CY 2010. DHMH measured PAC ambulatory care, mental health service, and prescription drug utilization between CY 2007 and CY 2009. Ambulatory care and prescription utilization increased during the study period. The percentage of enrollees accessing mental health services increased by 3.5 percentage points, from 14 percent in CY 2005 to 17.5 percent in CY 2009. On January 1, 2010, Maryland added outpatient ED visits to the PAC benefit package. Preliminary analysis shows that 34 percent of PAC enrollees had at least one ED visit in CY 2010. This will be used as a benchmark for evaluating future PAC ED utilization. DHMH began using PAC HEDIS measures in CY 2008. PAC performance on these measures improved during the study period, but remained lower than the HEDIS Medicaid national average.

Conclusion

HealthChoice is a mature program that provides services to approximately 12 percent of Marylanders. The information presented in this evaluation provides strong evidence of HealthChoice's successful achievement of its stated goals related to coverage and access to care, providing a medical home to enrollees, and improving quality of care. As with any program, there are areas that need to be improved to ensure that the growing number of enrollees have access to quality care. DHMH is committed to working with HealthChoice stakeholders to identify and address ongoing necessary programmatic changes.

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