

Medicaid Managed Care Organization



Value-Based Purchasing Activities Report



Final Report

Calendar Year 2005



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Calendar Year 2005 Value-Based Purchasing Activities

National Value-Based Purchasing Activities

Private and public purchasers of health care have increasingly promoted value-based purchasing strategies to improve health care quality. Value-based purchasing improves quality by awarding business and incentives to contractors based on their performance along a range of dimensions. Virtually all large Fortune 500 companies report collecting some information about health plan quality, and approximately 30 state Medicaid agencies collect information about enrollee's satisfaction with care.¹

Value-based purchasing initiatives are supported by multiple national organizations. For example, the National Health Care Purchasing Institute (NHCPI) has worked to improve health care quality by advancing the purchasing practices of major corporations, government agencies, and public employers. NHCPI's work has been incorporated into The Leapfrog Group, a collaborative of 160 public and private health care purchasers working to improve health care quality and to save lives by recognizing improvements in health care quality, patient safety, and customer value with preferential use and intensified market reinforcements. The Center for Health Care Strategies' State Purchasing Programs works with state Medicaid and State Children's Health Program (SCHIP) agencies to develop, pilot, and implement value-based purchasing strategies.

The Maryland Department of Health and Mental Hygiene (DHMH) began working with the Center for Health Care Strategies in 1999 to develop a value-based purchasing initiative for HealthChoice, Maryland's Medicaid managed care program. Maryland is at the forefront of states' adoption of this type of quality strategy. Other early adopters of value-based purchasing initiatives for Medicaid managed care programs include Massachusetts, Rhode Island, and Wisconsin.

Maryland HealthChoice Goals

The goal of Maryland's purchasing strategy is to achieve better enrollee health through improved managed care organization (MCO) performance. Appropriate service delivery is promoted by aligning MCO incentives with the provision of high-quality care, increased access, and administrative efficiency. Maryland's purchasing

¹Vittorio, M., Goldfarb, N. I., Carter, C., & Nash, D. B. (2003). *Value-based purchasing: A review of the literature*. Retrieved June 2, 2003, from The Commonwealth Fund Web site: <http://www.cmwf.org>

strategy aims to better coordinate a variety of quality improvement efforts toward a shared set of priorities that focus on the core populations served by HealthChoice. In addition, the state's strategy meets the requirements of the Federal Balanced Budget Act of 1997. See Appendix II for more information on compliance with federal law and regulations.

2005 Performance Measures

DHMH solicited input from stakeholders including MCOs, the Medicaid Advisory Committee, the Special Needs Children Advisory Committee, and Local Health Officers in selecting the performance measures for 2005. The measures address three dimensions of plan performance.

- Access to Care: The ability of patients to get needed services in a timely manner.
- Quality of Care: The ability to deliver services to improve health outcomes.
- Administration: Structure of the health care delivery system that enables delivery of services.

DHMH selected measures that are (1) relevant to the core populations served by HealthChoice, including children, pregnant women, special needs children, disabled adults, and adults with chronic conditions; (2) relevant to the State of Maryland's priority areas for improvement, such as dental services and lead screening; (3) evidence based, to ensure that delivery of the service is known to improve health outcomes; (4) measurable with available data; (5) comparable to the performance measures of other state and commercial plans, to provide for benchmarking; (6) consistent with the way in which the Centers for Medicare & Medicaid Services is developing a national set of performance measures for Medicaid MCOs; and (7) possible for MCOs to affect so that they can be held accountable.

Performance targets for the measures were set in several ways, depending on the data source and other factors. For those measures based on the Health Plan Employer Data and Information Set (HEDIS®), targets were set from national Medicaid HEDIS benchmarks (90th percentile based on 2001 data for incentives) and Maryland's average HEDIS scores (95% of the Maryland average based on 2001 data for disincentives). A set of performance measures designed to provide information for comparison of health plan performance, HEDIS is a nationally accepted system used by employers, government agencies, consumers, health plans, and others. For measures based on encounter data, targets were set from Maryland's scores (105% of the best performer in Maryland based on 2001 data for incentives and 95% of the Maryland average based on 2001 data for disincentives). Other targets were set according to regulatory requirements and legislative mandates.

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Table 1 shows the 2005 measures and their targets. More information on data sources and target rationale is included in Appendix III.

Table 1. 2005 Value-Based Purchasing Performance Measures

Performance Measure	Data Source	2005 Target
Well-Child Visits for Children Ages 3 through 6: % of children ages 3–6 (enrolled 320 or more days) receiving at least one well-child visit during the year, consistent with American Academy of Pediatrics and EPSDT recommended number of visits	HEDIS	Incentive: >68% Neutral: 61%–68% Disincentive: <61%
Dental Services for Children Ages 4 through 20:* % of children ages 4–20 (enrolled 320 or more days) receiving at least one dental service during the year	Encounter Data	Incentive: >60% Neutral: 40%–60% Disincentive: <40%
Ambulatory Care Services for SSI Adults: % of SSI adults (enrolled 320 or more days) receiving at least one ambulatory care service during the year	Encounter Data	Incentive: >86% Neutral: 72%–86% Disincentive: <72%
Ambulatory Care Services for SSI Children: % of SSI children (enrolled 320 or more days) receiving at least one ambulatory care service during the year	Encounter Data	Incentive: >77% Neutral: 63%–77% Disincentive: <63%
Timeliness of Prenatal Care: % of pregnant women (enrolled 43 days prior to delivery through 56 days after delivery) who receive a prenatal visit during the first trimester or within 42 days of enrollment	HEDIS	Incentive: >89% Neutral: 72%–89% Disincentive: <72%
Cervical Cancer Screening for Women Ages 21–64: % of women ages 21–64 (continuously enrolled during reporting year) receiving at least one PAP test during the last 3 years, consistent with U.S. Preventive Services Task Force recommendations	HEDIS	Incentive: >77% Neutral: 47%–77% Disincentive: <47%
Lead Screenings for Children Ages 12–23 Months: % of children ages 12–23 months (enrolled 90 or more days) who receive lead test during the year	Encounter Data and Lead Registry Data	Incentive: >53% Neutral: 41%–53% Disincentive: <41%
Eye Exams for Diabetics: % of diabetics (continuously enrolled during reporting year) receiving dilated funduscopy eye exam during the year, consistent with American Diabetes Association recommendations	HEDIS	Incentive: >64% Neutral: 42%–64% Disincentive: <42%
Childhood Immunization Status: % of children who turned 2 years old during the measurement year who were continuously enrolled for 12 months immediately preceding their second birthday and who had 4 DtaP/DT, 3 IPV, 1 MMR, 3 H influenza type B, 3 hepatitis B, and 1 chicken pox vaccine (VZV) by the time period specified and by the child’s second birthday (aka: Combo 2)	HEDIS	Incentive: >68% Neutral: 50%–68% Disincentive: <50%

Performance Measure	Data Source	2005 Target
Practitioner Turnover: % of primary care physicians affiliated with the MCO as of December 31 of the year prior to the measurement year who were not affiliated with the MCO as of December 31 of the measurement year	HEDIS	N/A
Claims Timeliness: % of claims paid/denied by MCO within 30 days of receipt	Claims Audit-EQRO	N/A

* Dental incentive target is a legislative mandate.

For 2005, the claims timeliness measure was calculated by DHMH’s External Quality Review Organization (EQRO) contractor, Delmarva Foundation (Delmarva) utilizing the same methodology that was employed in 2003 and 2004. This approach was taken in order to maintain the measure within the Value Based Purchasing measure set despite NCQA’s indefinite suspension of the HEDIS Claims Timeliness measure. In accordance with legislation from the 2005 Maryland General Assembly, DHMH changed regulations to focus on targets for clinical measures. Therefore, the Practitioner Turnover and Claims Timeliness measures do not have performance thresholds. Otherwise, the measure set is identical to the measurement year 2004 set of indicators. In future years, measures may be added, removed, or rotated in or out of the measure set. The flexibility of this strategy provides the opportunity to change measures based on evolving DHMH priorities and enrollee health care needs.

2005 Results

The 2005 performance results were validated by Delmarva, and DHMH’s contracted HEDIS Compliance Audit™ firm, HealthcareData.com, LLC. The contractors determined whether the measures were calculated correctly and validated the accuracy of the performance scores. All measures were calculated in a manner that does not introduce bias, allowing the results to be used for public reporting and the Value Based Purchasing program. See Appendix III for more information on the validation process and results.

In calendar year (CY) 2005, there were seven HealthChoice MCOs:

- AMERIGROUP Maryland, Inc. (AGM),
- Diamond Plan (DIA),
- Helix Family Choice, Inc. (HFC),
- Jai Medical Systems, Inc. (JMS),

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- Maryland Physicians Care (MPC),
- Priority Partners (PPMCO), and
- UnitedHealthcare (UHC).

For the majority of the MCOs, all measures scored either within the neutral or incentive ranges. The results are summarized in Table 2.

Table 2. Performance Summary

Performance Measure	2005 Target	MCO						
		AGM	DIA	HFC	JMS	MPC	PPMCO	UHC
		Incentive (I); Neutral (N); Disincentive (D)						
Well-child visits for children ages 3–6	Incentive: >68% Neutral: 61%–68% Disincentive: <61%	79.5% (I)	48.7% (D)	65.9% (N)	84.4% (I)	69.7% (I)	70.3% (I)	69.7% (I)
Dental services for children ages 4–20	Incentive: >60% Neutral: 40%–60% Disincentive: <40%	45.4% (N)	29.8% (D)	48.6% (N)	45.2% (N)	45.3% (N)	48.4% (N)	43.5% (N)
Ambulatory care services for SSI adults	Incentive: >86% Neutral: 72%–86% Disincentive: <72%	75.4% (N)	65.0% (D)	80.8% (N)	83.1% (N)	79.2% (N)	82.2% (N)	77.7% (N)
Ambulatory care services for SSI children	Incentive: >77% Neutral: 63%–77% Disincentive: <63%	67.9% (N)	47.6% (D)	74.0% (N)	72.7% (N)	71.8% (N)	73.5% (N)	65.6% (N)
Timeliness of prenatal care	Incentive: >89% Neutral: 72%–89% Disincentive: <72%	94.1% (I)	68.2% (D)	90.3% (I)	82.9% (N)	85.2% (N)	82.5% (N)	89.9% (I)
Cervical cancer screening for women ages 21–64	Incentive: >77% Neutral: 47%–77% Disincentive: <47%	68.1% (N)	36.8% (D)	61.1% (N)	71.3% (N)	62.4% (N)	58.4% (N)	57.4% (N)
Lead screenings for children ages 12–23 months	Incentive: >53% Neutral: 41%–53% Disincentive: <41%	51.1% (N)	38.7% (D)	52.4% (N)	55.9% (I)	52.4% (N)	53.4% (I)	43.7% (N)
Eye exams for diabetics	Incentive: >64% Neutral: 42%–64% Disincentive: <42%	76.2% (I)	9.7% (D)	66.2% (I)	74.1% (I)	50.1% (N)	52.3% (N)	54.7% (N)
Childhood immunization status—Combo 2	Incentive: >68% Neutral: 50%–68% Disincentive: <50%	88.2% (I)	NA	74.2% (I)	77.4% (I)	69.8% (I)	79.6% (I)	71.0% (I)
Practitioner turnover	N/A	6.7%	2.4%	7.2%	9.5%	3.7%	2.1%	8.4%
Claims timeliness	N/A	94.2%	97.6%	98.6%	98.5%	95.8%	90.4%	93.8%

2005 Sanctions

Financial sanctions were assessed for Value-Based Purchasing measures where performance was below minimum compliance targets. The Incentive Fund Pool was re-directed to fund MedBank through fiscal year 2006; financial incentives for performance over the incentive targets will not be available in fiscal year 2006. An incentive methodology was applied to allow plans to offset sanctions or disincentives.

The methodology for assessing sanctions is the same for all measures except dental. The dental sanctions differ from the other measures: the targets are legislatively set and the MCOs received funds to fully cover their costs under the capitation rates. Sanctions for all measures except dental are assessed by calculating the number of percentage points below the disincentive target, multiplied by the MCO's per 1,000 enrollment level (based on the MCO's average total enrollment in CY 2005), multiplied by a defined dollar amount. The dollar amount increases as the score moves further below the target. The sanctioning amount ranges are shown in Table 3.

Table 3. 2005 Sanction Dollar Amounts

Points Below Performance Sanctioning Target	Sanction Amount
1 to 10 points	\$50 per point multiplied by the MCO's per 1,000 enrollment level
11 to 20 points	\$100 per point multiplied by the MCO's per 1,000 enrollment level
21 points and below	\$150 per point multiplied by the MCO's per 1,000 enrollment level

The incentive amounts applied to offset any disincentives are shown in Table 4.

Table 4. 2005 Incentive Offset Amounts

Points Above Performance Incentive Target	Amount Applied To Offset Any Disincentives
1 to 10 points	\$100 per point multiplied by the MCO's per 1,000 enrollment level
11 to 20 points	\$200 per point multiplied by the MCO's per 1,000 enrollment level
21 points and above	\$300 per point multiplied by the MCO's per 1,000 enrollment level

For both sanctions and incentives, the increase in dollar amount applies only to those points within the corresponding ranges. For example, if an MCO's performance is 22 points below the sanctioning target, DHMH will apply a \$50 sanction amount to each of the first 10 points; a \$100 sanction amount to each of the second 10 points; and a \$150 sanction amount to each of the last 2 points. Any sanctions will be withheld from MCOs' future capitation payments.

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For the dental performance measure, sanctions are assessed by calculating the number of percentage points below the 40% target utilization rate, multiplied by the MCO's per 1,000 enrollment level for the population of interest (i.e., children age 4 through 20 enrolled for 320 or more days as of December 31 of the measurement year), multiplied by \$500.

The MCOs' incentive and sanction amounts for 2005 performance are shown in Table 5. Sanction amounts are shown in parenthesis.

Table 5. 2005 MCO Incentive/Sanction Amounts

Performance Measure	MCO						
	AGM	DIA	HFC	JMS	MPC	PPMCO	UHC
Well-child visits for children ages 3–6	\$178,100	(\$2,920)	\$0	\$18,240	\$14,960	\$27,370	\$18,700
Dental services for children ages 4–20	\$0	(\$5,100)	\$0	\$0	\$0	\$0	\$0
Ambulatory care services for SSI adults	\$0	(\$1,400)	\$0	\$0	\$0	\$0	\$0
Ambulatory care services for SSI children	\$0	(\$4,160)	\$0	\$0	\$0	\$0	\$0
Timeliness of prenatal care	\$69,870	(\$760)	\$2,860	\$0	\$0	\$0	\$9,900
Cervical cancer screening for women ages 21–64	\$0	(\$2,080)	\$0	\$0	\$0	\$0	\$0
Lead screenings for children ages 12–23 months	\$0	(\$460)	\$0	\$2,320	\$0	\$4,760	\$0
Eye exams for diabetics	\$197,280	(\$13,380)	\$4,840	\$8,160	\$0	\$0	\$0
Childhood immunization status—Combo 2	\$419,220	NA	\$13,640	\$7,520	\$15,840	\$157,080	\$33,000
Total Incentive/Sanction Amount	\$864,470	(\$30,260)	\$21,340	\$36,240	\$30,800	\$189,210	\$61,600

Conclusion

The HealthChoice Value-Based Purchasing quality strategy has multiple strengths. It emphasizes continuous quality improvement and evidence-based medicine, making it consistent with trends in the larger health care market. The strategy increases the comparability of Maryland's performance to that of other states, enabling the sharing of best practices. In addition, performance evaluation based on administrative and encounter data rather than on the review of a small sample of medical records means that the quality indicators are representative of more enrollees.

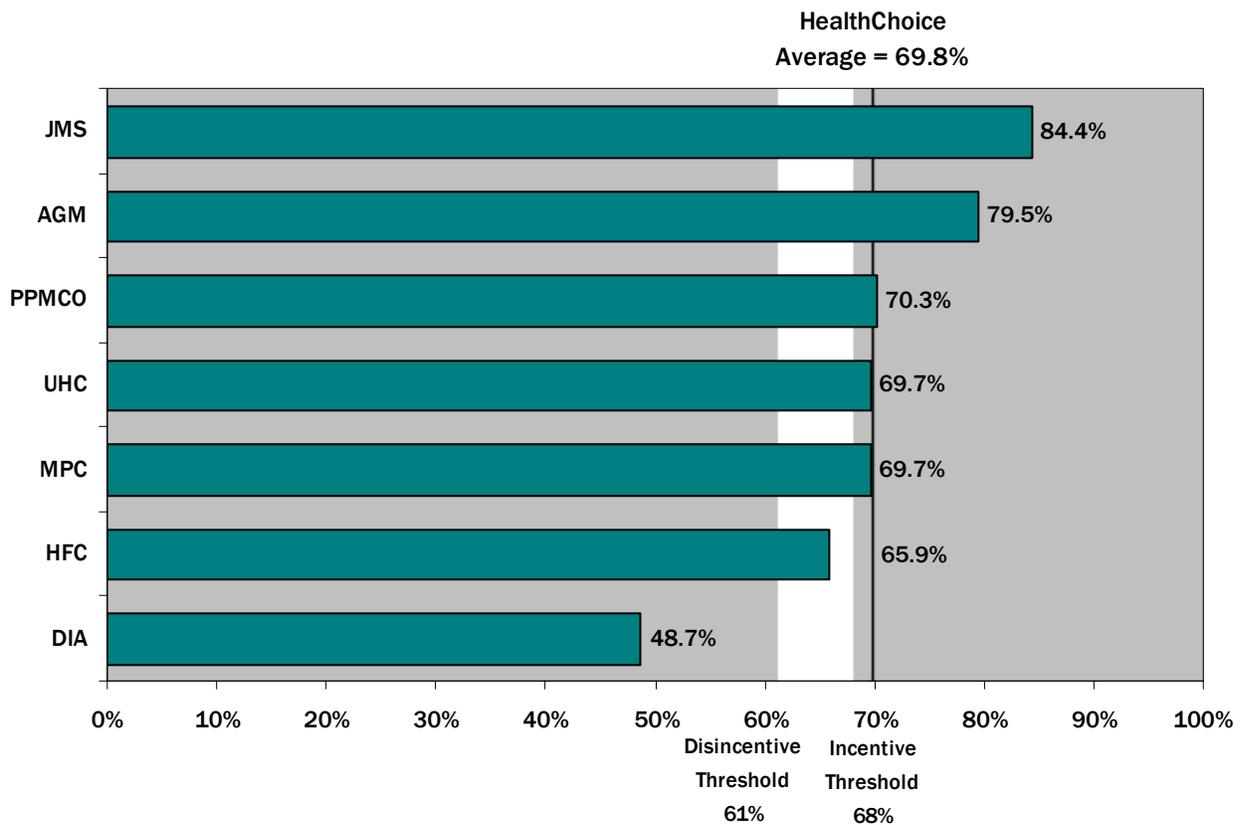
In future years, more measures may be added or measures may be rotated. This flexibility allows DHMH and participating MCOs to better meet changing health needs. If budgetary pressures continue and prevent DHMH from offering monetary incentives, DHMH will continue to explore other methods of providing incentives, such as offsetting disincentives and reducing administrative burdens.

Appendix I

MCO Performance By Individual Performance Measures

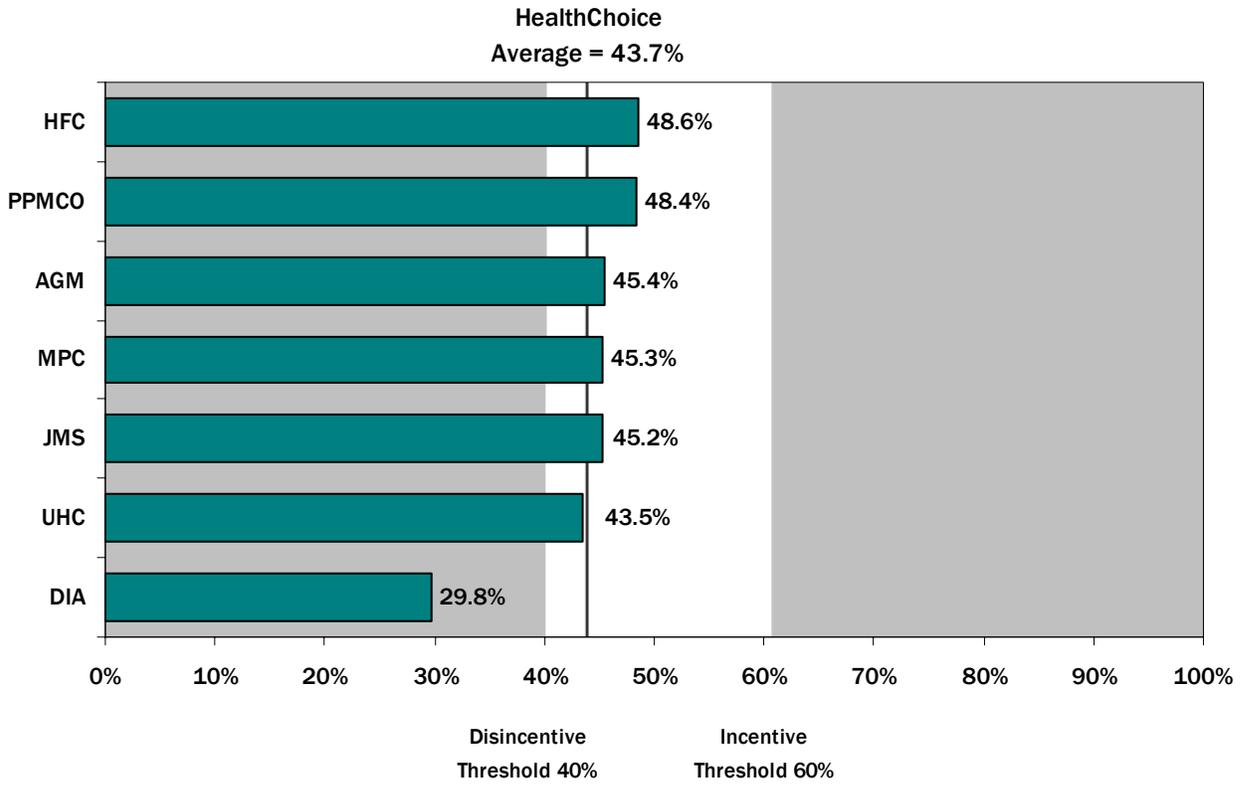
The following graphs represent the performance rates for each Value-Based Purchasing measure. Each graph presents each MCO’s rate, the disincentive and incentive threshold, as well as the HealthChoice average. The HealthChoice Average is an un-weighted average of all MCO rates.

Well-Child Visits for Children Ages 3 through 6



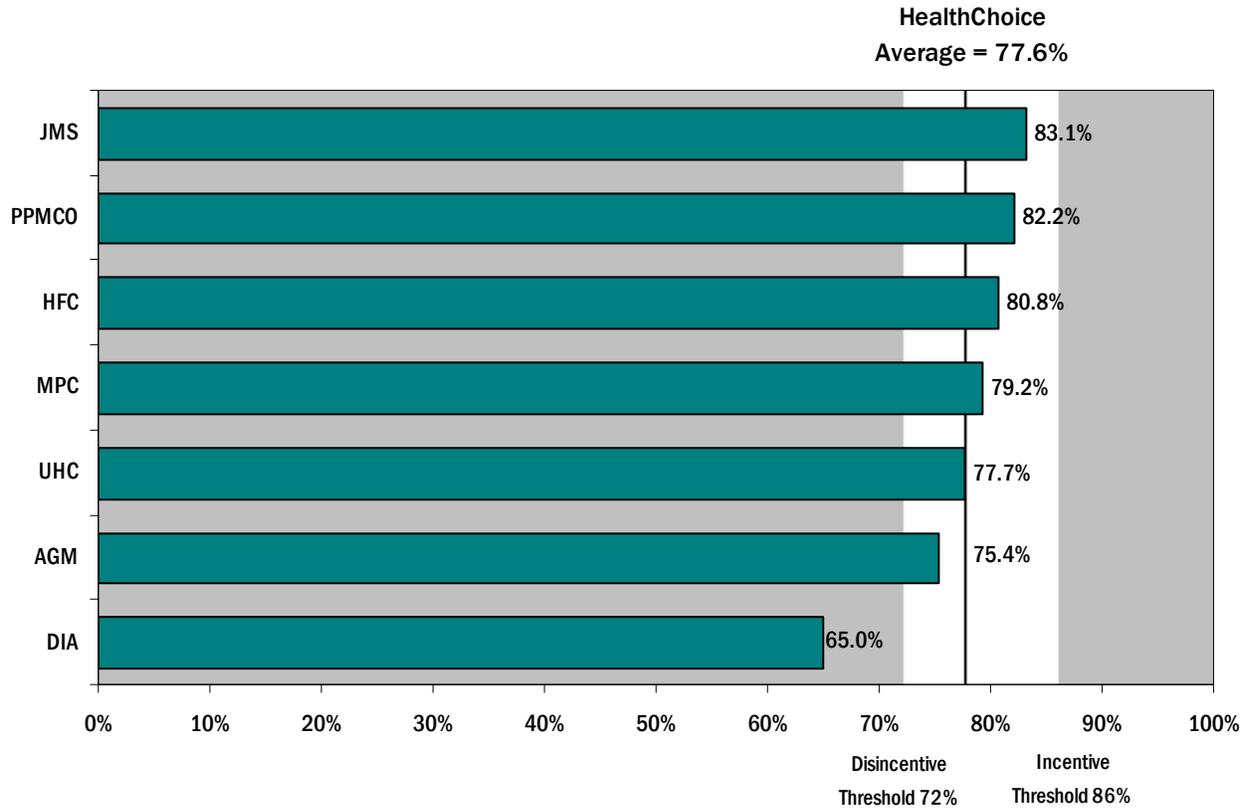
Performance rates range from 48.7% to 84.4% with the highest performer being JMS. Five MCOs, AGM, JMS, MPC, PPMCO, and UHC, performed above the incentive threshold of 68%. HFC performed within the neutral range (61% through 68%) and DIA performed below the disincentive threshold with a rate of 48.7%. The HealthChoice average is 69.8% which is above the incentive threshold.

Dental Services for Children Ages 4 through 20



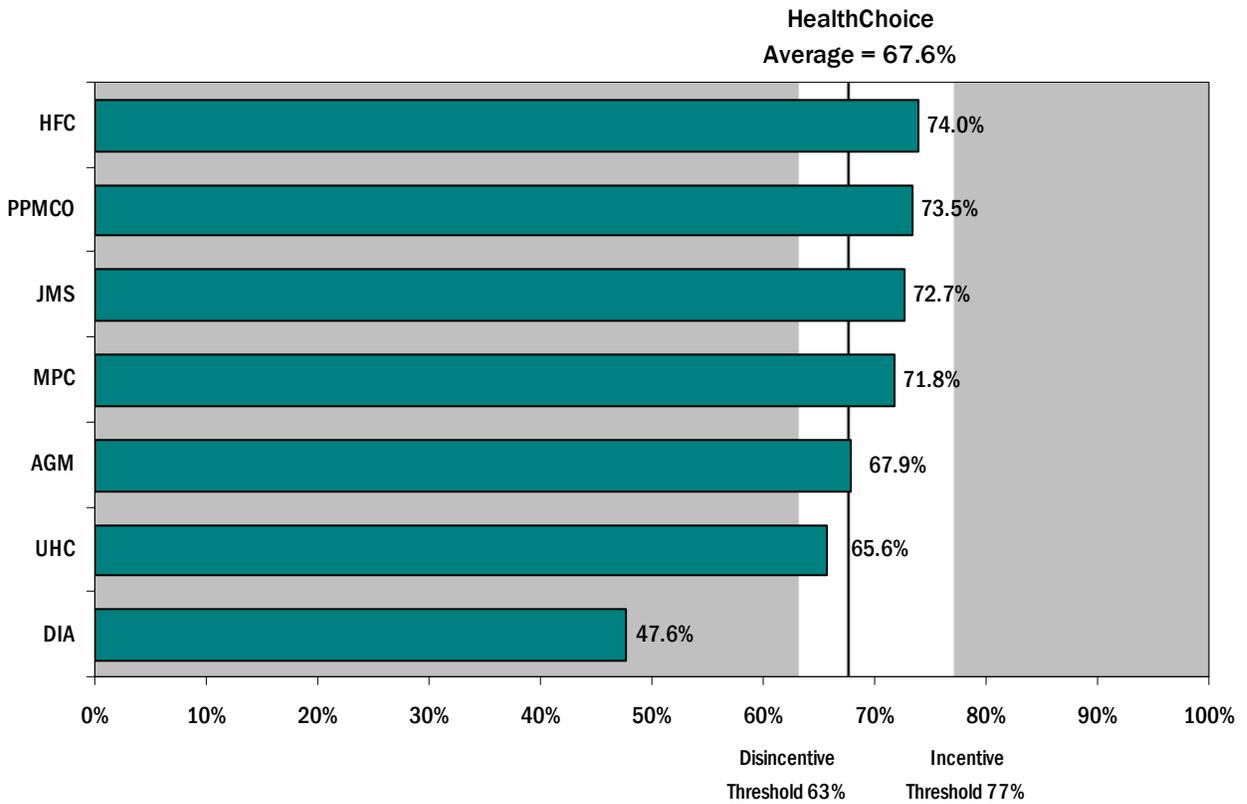
Performance rates range from 29.8% to 48.6% with the highest performer being HFC. Six MCOs performed within the neutral range (40% through 60%). One MCO, DIA, performed below the disincentive threshold (40%) with a rate of 29.8%. The HealthChoice average is 43.7% which is within the neutral range.

Ambulatory Care Services for SSI Adults



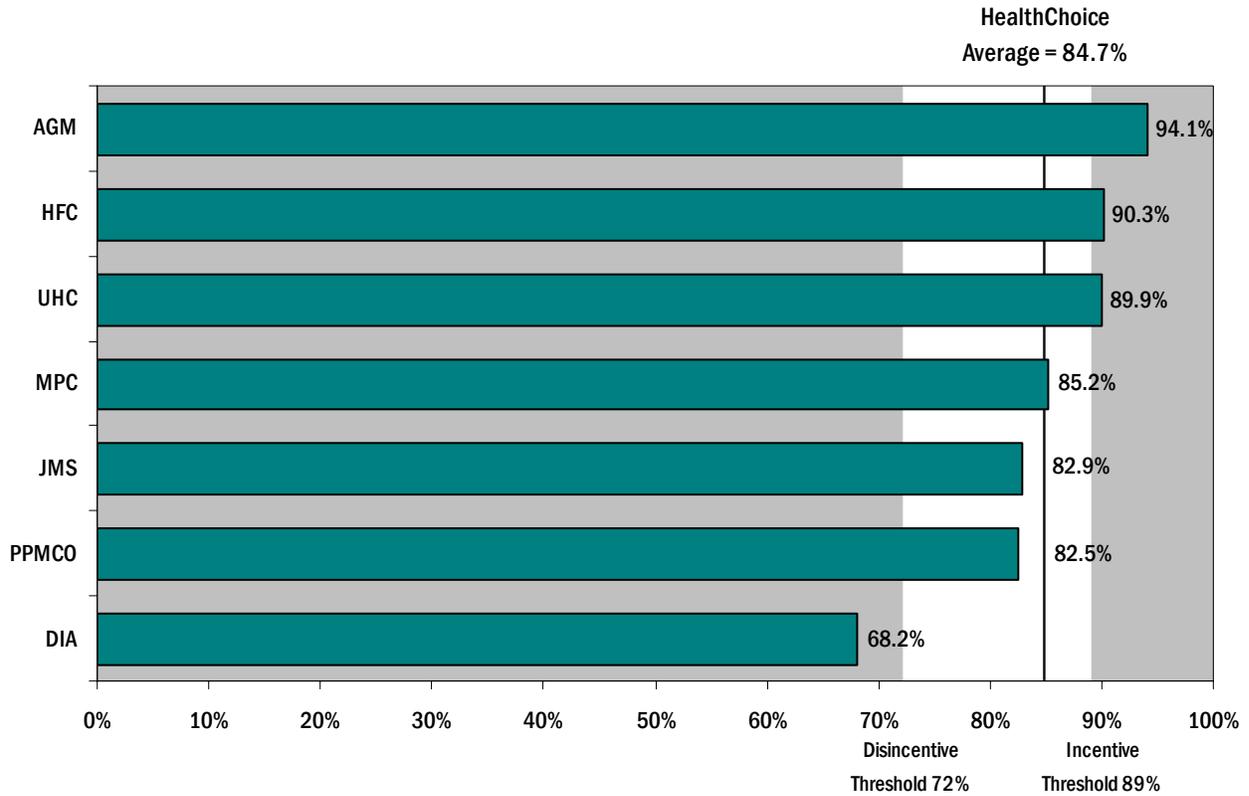
Performance rates range from 65.0% to 83.1% with the highest performer being JMS. Six MCOs performed within the neutral range (72% through 86%). One MCO, DIA, scored below the disincentive threshold with a rate of 65.0%. The HealthChoice average is 77.6% which is within the neutral range.

Ambulatory Care Services for SSI Children



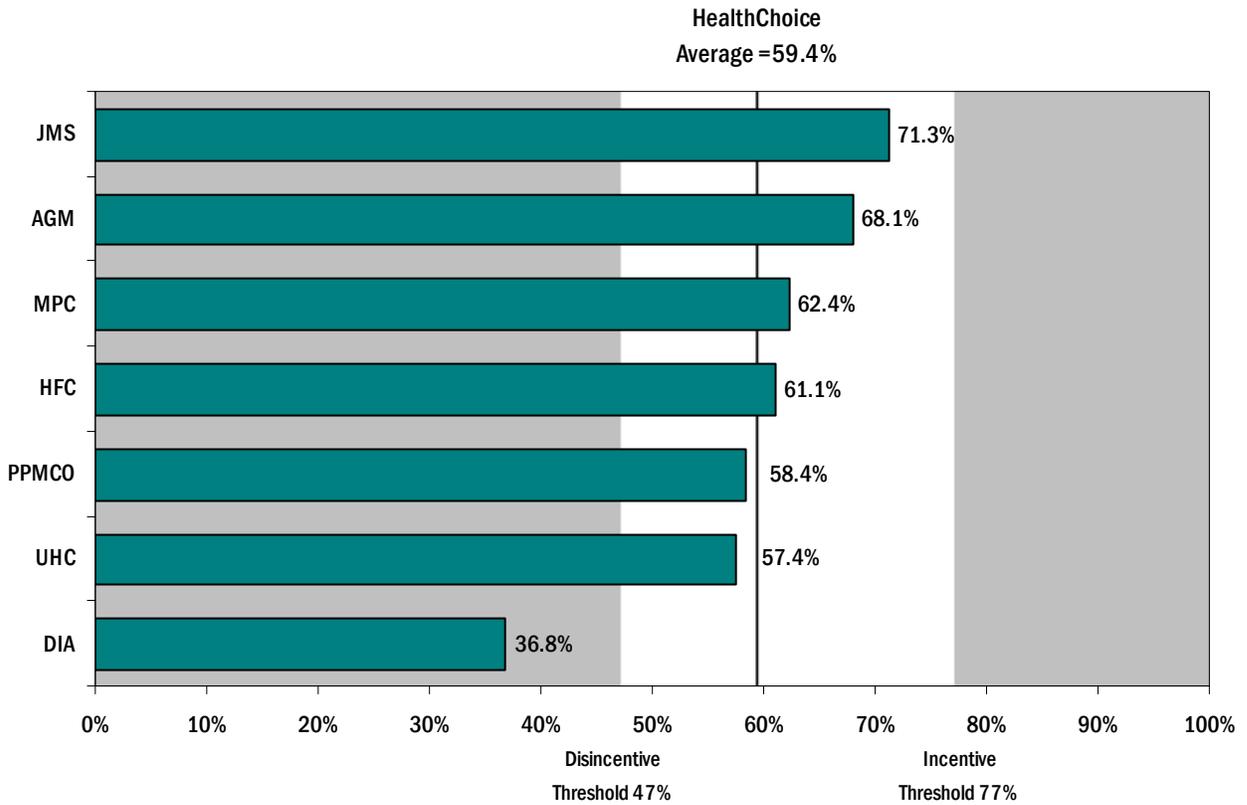
Performance rates range from 47.6% to 74% with the highest performer being HFC. Six MCOs performed within the neutral range (63% through 77%). One MCO, DIA, performed below the disincentive threshold with a rate of 47.6%. The HealthChoice average is 67.6% which is within the neutral range.

Timeliness of Prenatal Care



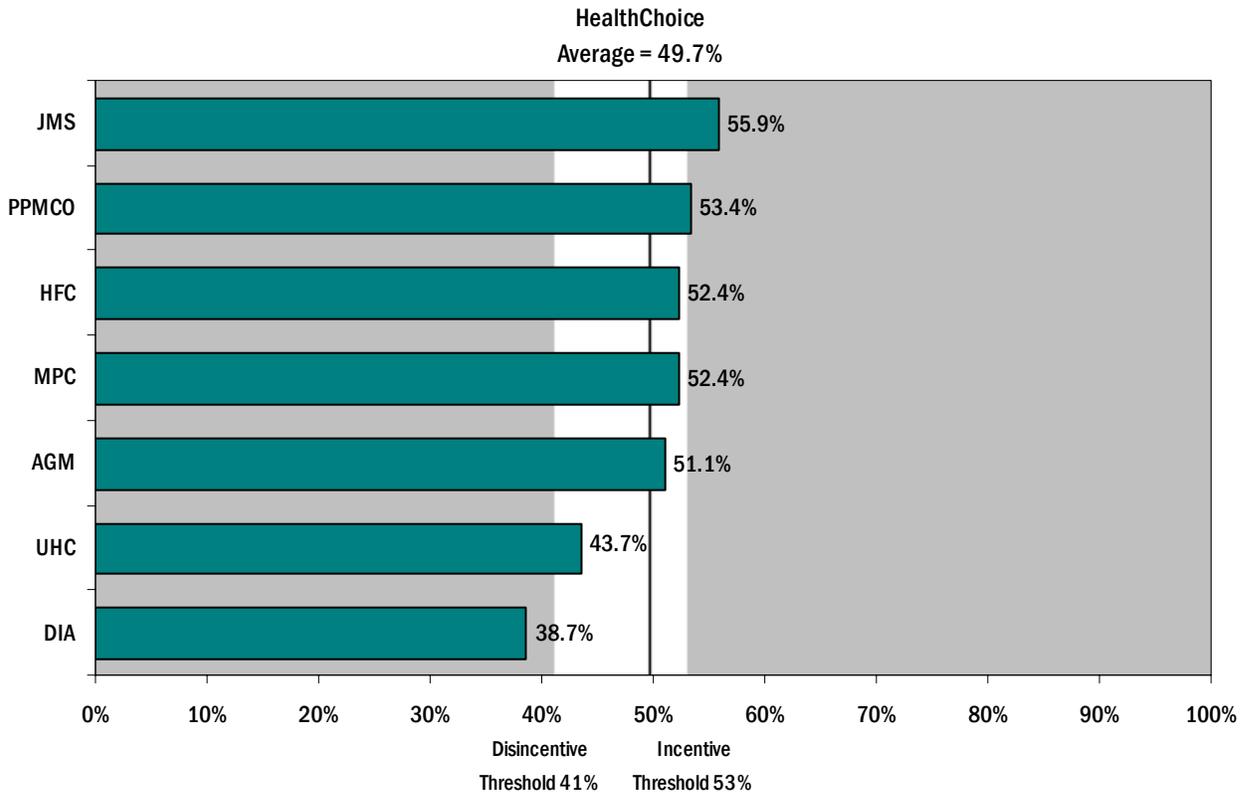
Performance rates range from 68.2% to 94.1% with the highest performer being AGM. Three of the MCOs, AGM, HFC, and UHC, scored above the incentive threshold of 89%. Three MCOs performed within the neutral range (72% through 89%). One MCO, DIA, scored below the disincentive threshold with a rate of 68.2%. The HealthChoice average is 84.7% which is within the neutral range.

Cervical Cancer Screening for Women Ages 21–64



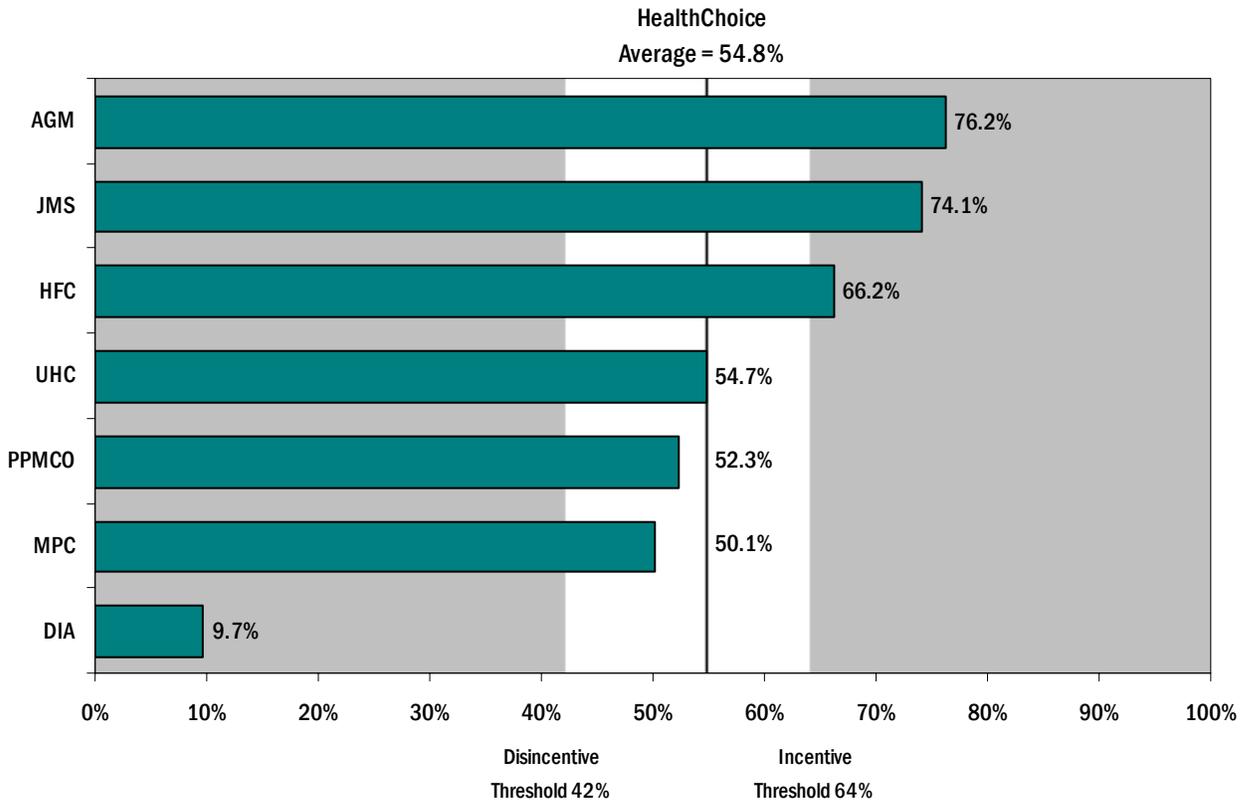
Performance rates range from 36.8% to 71.3% with the highest performer being JMS. Six MCOs performed within the neutral range (47% through 77%). One MCO, DIA, scored below the disincentive threshold with a rate of 36.8%. The HealthChoice average is 59.4% which is within the neutral range.

Lead Screenings for Children Ages 12–23 Months



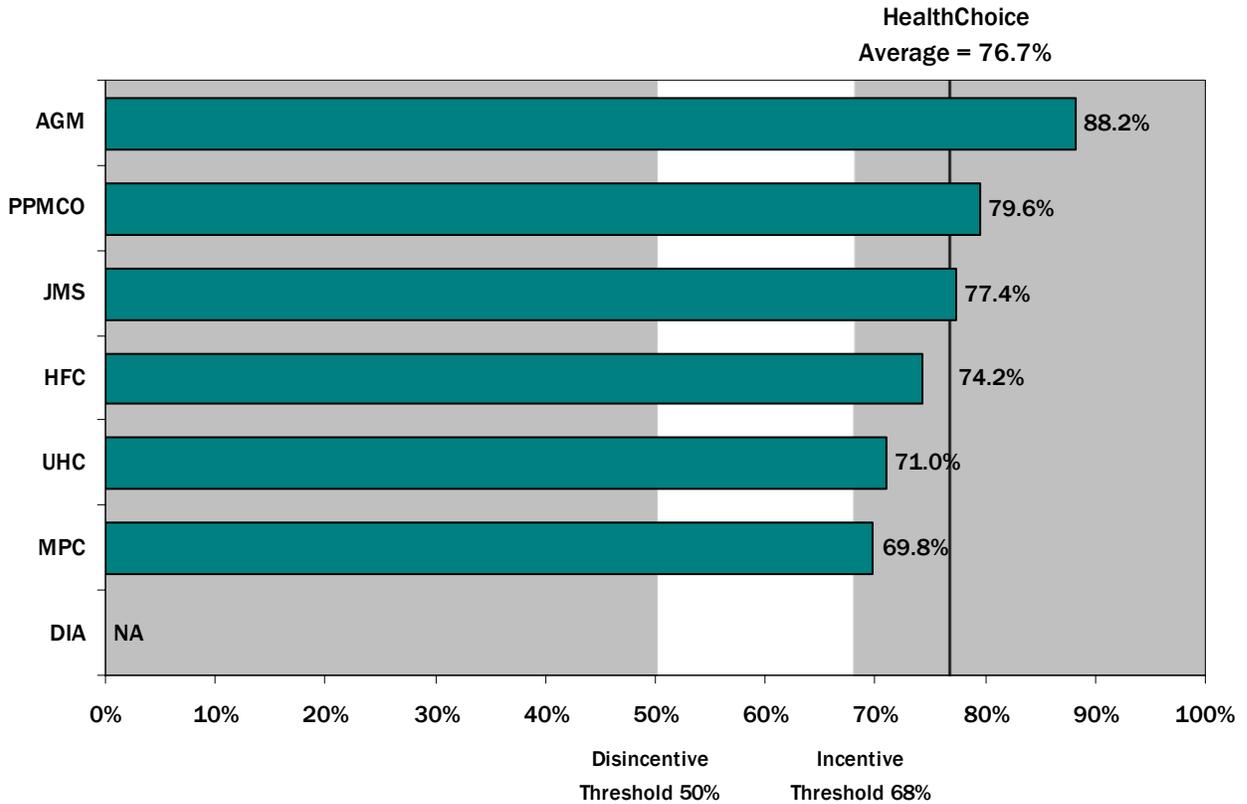
Performance rates range from 38.7% to 55.9% with the highest performer being JMS. Two MCOs, JMS and PPMCO, performed above the incentive threshold. Four MCOs performed within the neutral range (41% through 53%). One MCO, DIA, performed below the disincentive threshold with a rate of 38.7%. The HealthChoice average is 49.7% which is within the neutral range.

Eye Exams for Diabetics



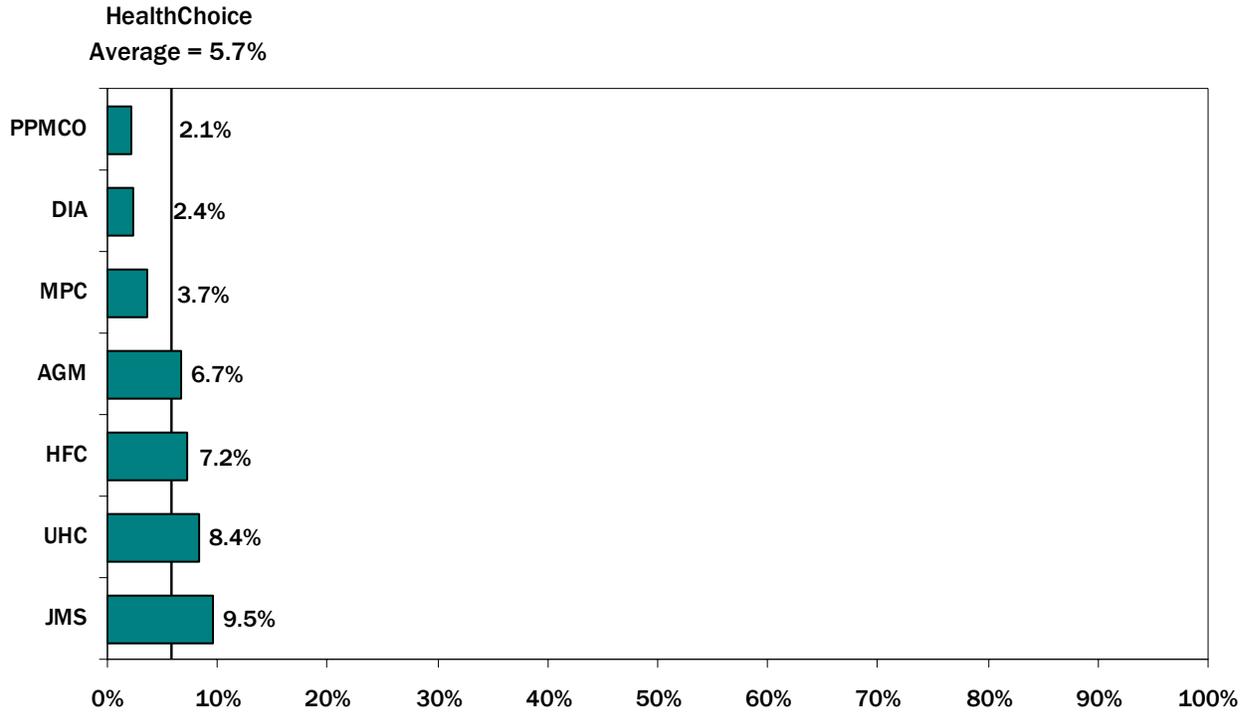
Performance rates range from 9.7% to 76.2% with the highest performer being AGM. Three MCOs, AGM, HFC, and JMS, scored above the incentive threshold. Three MCOs performed within the neutral range (42% to 64%). One MCO, DIA scored below the disincentive threshold with a rate of 9.7%. The HealthChoice average is 54.8% which is within the neutral range.

Childhood Immunization Status—Combo 2



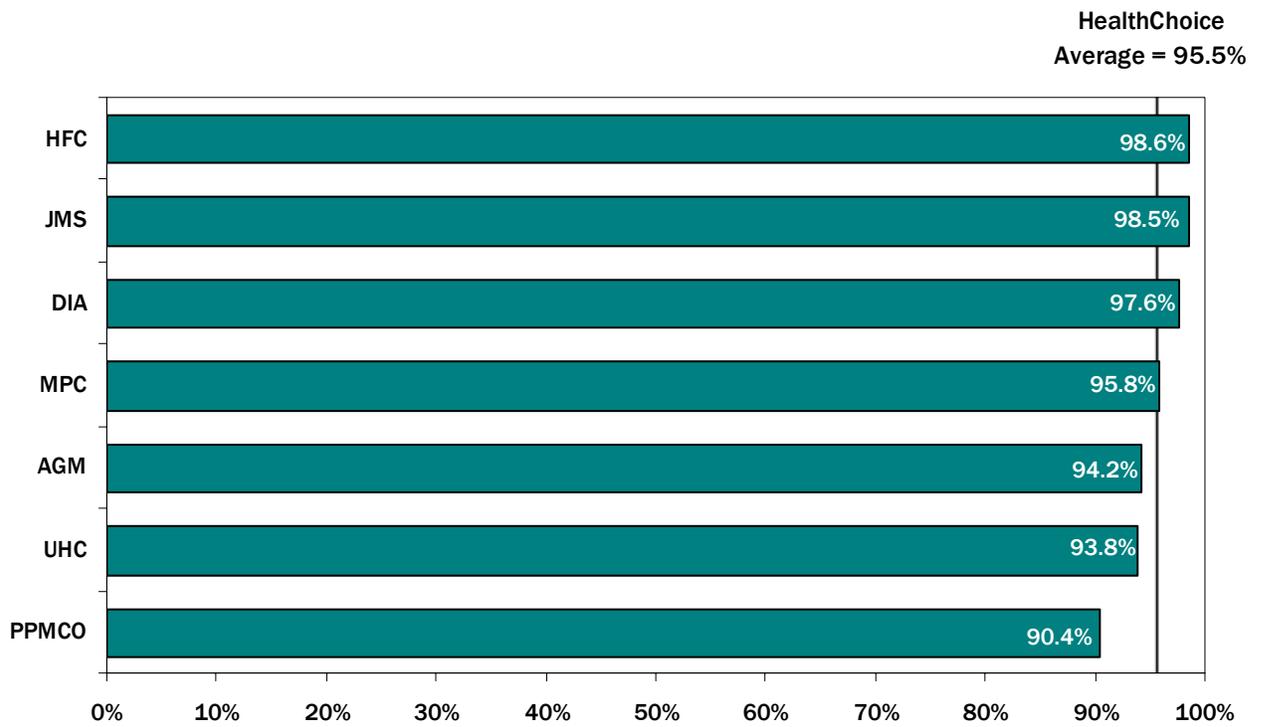
Performance rates range from 69.8% to 88.2% with the highest performer being AGM. All MCOs reporting for this measure performed above the incentive threshold of 68%. DIA did not report a result for this measure because the eligible population was too small to yield reliable results (<30). The HealthChoice average is 76.7% which is above the incentive threshold of 68%.

Practitioner Turnover



For this indicator, lower rates indicate a more stable environment (e.g. fewer practitioners leaving the MCO). Performance rates range from 2.1% to 9.5% with PPMCO having the lowest practitioner turnover rate. The HealthChoice average is 5.7%.

Claims Timeliness



Performance rates range from 90.4% to 98.6% with the highest performer being HFC. The HealthChoice average is 95.5%.

Appendix II

Compliance with the Federal Balanced Budget Act of 1997

The Medicaid Managed Care Provisions of the Balanced Budget Act of 1997 (BBA) directed the U.S. Department of Health and Human Services to develop protocols to serve as guidelines for use in conducting EQRO activities and validating performance measures such as those included in the HealthChoice value-based purchasing (VBP) program. Nine protocols were developed for the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS), by the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO) with input from several contractors, State Medicaid agencies, and advocates for Medicaid beneficiaries. The protocols were developed to be consistent with industry standards, accommodate continued evolution of quality assessment, and provide technical assistance to State Medicaid agencies with a clear description of the scope and depth of quality review activities. The protocols were released in draft format on October 23, 2001, with the final versions issued between May 1, 2002, and February 11, 2003, after publication in the *Federal Register* and a comment period.

The protocol most relevant to VBP is entitled “Validating Performance Measures.” The purpose of the Validating Performance Measures protocol is to specify the activities to be undertaken by an EQRO in order to evaluate the accuracy of Medicaid performance measures reported by, or on behalf of, an MCO and to determine the extent to which Medicaid-specific performance measures calculated by an MCO (or entity acting on behalf of an MCO) followed specifications for the calculation of performance measures. This protocol was developed using National Committee for Quality Assurance (NCQA), Island Peer Review Organization (IPRO), and MedStat protocols and tools for auditing performance measures. The activities outlined in the protocol include a review of the data management processes of the entity that produced the measure, an evaluation of algorithmic compliance with specifications defined by the State, and possibly verification of either the entire set or a sample of the State-specified performance measures to confirm that the reported results are based on an accurate source information. There are three phases to the validation activities: pre-onsite, onsite, and post-onsite. During each phase, information is gathered and analyzed with results communicated to the entity producing the measure indicating identified issues or requests for clarification. The result of all validation activities is to determine the extent to which the entity has complied with the requirements for calculating and reporting the performance measures, and to issue a validation finding for each performance measure.

In compliance with the BBA, DHMH has contracted with Delmarva to serve as the EQRO for HealthChoice. Among the functions that Delmarva has been contracted to perform is the annual validation

of performance measures reported during the preceding calendar year by the State of Maryland, its contractors, and the MCOs. Delmarva uses CMS protocols in validating VBP measure results.

Delmarva and DHMH's contracted HEDIS Compliance Audit™ firm, HealthcareData.com, LLC, validated the CY 2005 HEDIS-based VBP measures. HealthcareData.com, an NCQA-certified HEDIS Compliance Audit firm, performed the validation of HEDIS-based VBP measures for five of the HealthChoice MCOs using NCQA's *HEDIS Volume 5: HEDIS Compliance Audit: Standards, Policies, and Procedures*. Two remaining MCOs contracted with other certified vendors to perform the HEDIS Compliance Audit with all results and final audit reports tabulated by HealthcareData.com and forwarded to Delmarva.

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Appendix III

Value-Based Purchasing Measure Validation

Data Sources

Three types of measures are included in the CY 2005 VBP measures: (1) measures from NCQA's HEDIS, (2) measures based on encounter data computed by DHMH's Office of Planning and Finance, and (3) a measure based on data supplied by the HealthChoice MCOs and calculated by Delmarva. Table A-1 shows the quality dimension, the type of measure, and the reporting entity for each measure. The measure type and the presence of an existing audit or validation process determined the validation activities undertaken.

Table A-1. CY 2005 VBP Measures

Performance Measure	Quality Dimension	Measure Type	Reporting Entity
Well-child visits for children ages 3–6	Access to Care	HEDIS	MCO
Dental services for children ages 4–20	Access to Care	Encounter Data	DHMH
Ambulatory care services for SSI adults	Access to Care	Encounter Data	DHMH
Ambulatory care services for SSI children	Access to Care	Encounter Data	DHMH
Timeliness of prenatal care	Access to Care	HEDIS	MCO
Cervical cancer screening for women ages 21–64	Quality of Care	HEDIS	MCO
Lead screenings for children ages 12–23 months	Quality of Care	Encounter Data and Lead Registry Data	DHMH
Eye exams for diabetics	Quality of Care	HEDIS	MCO
Childhood immunization status	Quality of Care	HEDIS	MCO
Practitioner turnover	Administration	HEDIS	MCO
Claims timeliness	Administration	Claims Audit EQRO	EQRO

Validation Methodology

Validation is the process by which an independent entity evaluates the accuracy of Medicaid performance measures reported by, or on behalf of, an MCO and determines the extent to which Medicaid-specific performance measures calculated by an MCO (or entity acting on behalf on an MCO) followed established

calculation specifications. A validation (or audit) determination is assigned to each measure, indicating whether the measure and its result is fully compliant, substantially compliant, and/or not valid.

HEDIS Measure Validation

HealthChoice MCOs are required to produce and report audited HEDIS data under COMAR 10.09.65.03.B(2). Six of the CY 2005 VBP measures are HEDIS measures and are validated under the provisions of the HEDIS Compliance Audit. In 1997, NCQA first released the *HEDIS Compliance Audit Standards and Guidelines*. The guidelines are updated annually and include standards for assessing the MCO information system characteristics and specification compliance for each HEDIS measure. The goal of the HEDIS audit is to ensure accurate, reliable, and publicly reportable data. DHMH has contracted with HealthcareData.com to perform the validation of HEDIS measures for the HealthChoice MCOs. In CY 2005, five MCOs utilized the DHMH-contracted audit firm. Two MCOs contracted with other certified vendors to perform the HEDIS Compliance Audit with all results and final audit reports tabulated by HealthcareData.com. All audit findings and performance measure rates are reported to Delmarva by HealthcareData.com.

The HEDIS Compliance Audit is conducted in three phases: offsite, onsite, and the post onsite and reporting phases. The offsite audit phase includes a review of each MCO's Baseline Assessment Tool (BAT). The BAT is used to supply information about an MCO's data systems and HEDIS data reporting structure and processes. Other activities undertaken during the offsite audit process include the selection of a core set of HEDIS measures to audit in detail (results are then extrapolated to the rest of the HEDIS measures), investigation of measure rotation strategies, and finally, validation of the medical record review process by the certified audit firm.

During the onsite phase, auditors investigate issues identified in the BAT and observe the systems used to collect and produce HEDIS data. The audit team interviews MCO staff members; reviews MCO information system structure, protocols, and processes; and reviews MCO measure-specific data collection processes with the staff responsible for selected measures.

The post onsite and reporting phase of the HEDIS Compliance Audit includes the issuance of a follow-up letter to the MCO that lists any items the auditors still require to complete the audit, a list of corrective actions for problems found in the BAT or onsite as well as the necessary completion dates, and preliminary audit findings specifically indicating the measures at risk for a *Not Report* designation. When the MCO has provided all requested documents and performed the recommended corrective actions, the auditor completes a final audit report and assigns audit designations for each measure. The audit designations indicate the suitability of measures for public reporting. The two possible audit designations are *Report* and *Not Report*, as explained in Table A-2. The final activity in the post onsite phase of the audit consists of the MCO submitting data to NCQA using the NCQA data submission tool.

Table A-2. HEDIS Compliance Audit Designations and Rationales

Audit Designation	Rationale
Report (R)	<ol style="list-style-type: none"> 1) The MCO followed the specifications and produced a reportable rate for the measure. 2) The MCO followed the specifications for producing a reportable denominator but the denominator was too small to report a valid rate, resulting in a Not Applicable (NA). 3) The MCO indicated that it did not offer a health benefit (e.g., Mental Health/Chemical Dependency) for which the measure is reported, resulting in a Not Applicable (NA). 4) The MCO produced an accurate survey sample frame and is using an NCQA-certified Survey Vendor (survey measures only).
Not Report (NR)	<ol style="list-style-type: none"> 1) The MCO calculated the measure but the rate was materially biased. 2) The MCO chose not to calculate the measure. 3) The MCO was not required to calculate the measure because it was not included in the scope of the Partial Audit or Full Audit required by a purchaser (e.g., CMS). 4) The MCO did not produce an accurate survey sample frame (survey measures only). 5) The MCO did not use an NCQA-certified survey vendor (survey measures only).

In order to avoid duplicating efforts and placing undue administrative burden on the HealthChoice MCOs, DHMH used six of the HEDIS audit measure determinations as VBP measure determinations. The six HEDIS measures in the VBP program are:

- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life,
- Prenatal and Postpartum Care (prenatal care indicator only),
- Cervical Cancer Screening,
- Comprehensive Diabetes Care (eye exam indicator only),
- Childhood Immunization Status (Combo 2 only) , and
- Practitioner Turnover.

Encounter Data Measure Validation

Three CY 2005 VBP measures were calculated by DHMH, using encounter data submitted by the MCOs. The measures calculated utilizing encounter data are:

- Dental services for children ages 4–20,
- Ambulatory care services for SSI adults,
- Ambulatory care services for SSI children, and
- Lead screenings for children ages 12–23 months.

Utilizing the framework proposed in the CMS protocol “Validating Performance Measures,” Delmarva validated these measures. The protocol outlines a validation procedure that includes three phases: pre-onsite, onsite, and post-onsite.

Information gathered as a result of the pre-onsite meeting included the specifications for each encounter data-based VBP measure, source code for each of the encounter data-based VBP measures to determine algorithmic compliance with the measure specifications, information regarding the encounter data processing system, and analysis of the encounter data process.

The onsite phase followed up on the findings from the review of information systems (encounter data capture, storage, and integration) and the detailed review of the source code programming in place to produce the VBP measures. Policies, procedures, reports, data flow sheets, source code, and source code logic flow charts were provided and reviewed during this phase of the validation process. Clarifications and corrections to source codes were conducted to ensure algorithmic compliance with VBP measure specifications.

Following the detailed review and interview processes, Delmarva completed the evaluation of the data gathered as part of the pre-onsite and onsite phases. Validation determinations were used to characterize the findings of the EQRO. Table A-3 indicates the possible determinations of the EQRO-validated measures.

Table A-3. Possible Validation Findings for EQRO-Validated Measures (encounter data)

Validation Determination	Definition
Fully Compliant (FC)	Measure was fully compliant with State specifications.
Substantially Compliant (SC)	Measure was substantially compliant with State specifications and had only minor deviations that did not significantly bias the reported rate.
Not Valid (NV)	Measure deviated from state specifications such that the reported rate was significantly biased. This designation is also assigned to measures where no rate was reported, although reporting of the rate was required.
Not Applicable (NA)	Measure was not reported because the entity did not have any Medicaid enrollees that qualified for the denominator.

EQRO-Reported Measure Validation

One CY 2005 VBP measure is calculated by the EQRO. The prompt adjudication of claims measure was calculated using data supplied by the HealthChoice MCOs and compared to information reported to the Maryland Insurance Administration (MIA) on the required Semi-annual Claims Data Filing Forms (example and instructions provided). The goal of this VBP measure is to characterize the performance of each MCO in paying claims for reimbursement within 30 days of receipt by the MCO. In addition to completing a review of the claims payment processes, policies and procedures, and systems in place at HealthChoice MCOs as part of the Annual Systems Performance Review, Delmarva analyzed the HealthChoice MCO data files for timeliness of claims adjudication between July 1, 2005 and September 30, 2005. The files submitted by the HealthChoice MCOs were analyzed to determine if claims were adjudicated within 30 days of receipt. The 30-day adjudication threshold is outlined in Insurance Article §15-1005 of the *Annotated Code of Maryland*.

The EQRO produced and internally validated this measure because the MIA collects the Semi-annual Claims Data Filing Forms submitted by HealthChoice MCOs, but does not validate the data reported. Semi-annual Claims Data Filing Forms submitted by commercial HMOs and their respective sub-contracted entities are reviewed by the MIA under the market conduct review phase of HMO licensing in Maryland. HealthChoice MCOs are not subject to the same reviews by MIA. DHMH determined, therefore, that an annual independent assessment conducted by the EQRO was appropriate to ensure that MCOs are accurately reporting the information included on the required report format and adjudicating claims in a timely manner.

The use of the entire population of claims adjudicated in the third quarter of CY 2005 was chosen in order to avoid several disadvantages and complexities of a sample-based system related to sampling error and confidence intervals. A result that is based on the population does not contain sampling error and the need to

take a confidence interval into account. It is the true rate of occurrence in the population studied. This allowed MCOs to supply only one claim file for the period under review.

Validation Results

Validation of the methodologies, criteria, and processes employed in creating the VBP measures results in a determination of the effect of bias on the resulting statistic. Validation determinations for HEDIS-based VBP measures determined by HealthcareData.com are reported using the audit designations and rationales outlined by NCQA as part of the HEDIS Compliance Audit. Table A-4 indicates the audit designations for the CY 2005 VBP measures for each HealthChoice MCO (designations are explained in Table A-2 above).

Table A-4. HEDIS-Based VBP Measure Audit Determinations

Measure	MCO						
	AGM	DIA	HFC	JMS	MPC	PPMCO	UHC
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	Report						
Prenatal and Postpartum Care (prenatal care portion only)	Report						
Cervical Cancer Screening	Report						
Comprehensive Diabetes Care (eye exam portion only)	Report						
Childhood Immunization Status (Combo 2 only)	Report	NA	Report	Report	Report	Report	Report
Practitioner Turnover	Report						

All of the VBP measures audited by HealthcareData.com were determined to be reportable, except for Childhood Immunization status for DIA.

Table A-5 shows the results of the EQRO led validation activities related to the VBP measures based on encounter data. The Office of Planning and Finance within DHMH was responsible for producing these VBP measures at the MCO level and working with the EQRO to validate the measures (see Table A-3 for validation findings).

Table A-5. Encounter Data-Based VBP Measure Validation Determinations

Measure	Validation Determinations
Dental services for children ages 4–20	Fully Compliant
Ambulatory care services for SSI adults	Fully Compliant
Ambulatory care services for SSI children	Fully Compliant
Lead screenings for children ages 12–23 months	Fully Compliant

During the validation process undertaken by the EQRO, no issues were identified that could have introduced bias to the resulting statistics.

Validation of the rates calculated by the EQRO was reached through a process by which the measure creation process and source code were reviewed and approved by two analysts and an analytic scientist at the EQRO.

Delmarva requested that each MCO supply data sets of all claims adjudicated in the third quarter of CY 2005. Data submissions were received and a standard data verification process was employed to ensure that data values submitted were within acceptable parameters and that the number of records received was in accordance with approximately half of the number reported to the MIA on the Semi-annual Claims Data Filing Forms that included the same period. Communication with the MCOs was initiated in cases where data were not supplied in the appropriate format, values were outside of expected parameters, or the volume of claims data was inconsistent with previously reported data. Any outstanding issues were resolved and the corrected or updated data files were used to create SAS data sets for calculation of the VBP claims adjudication measure.

Validation of the data contained in the MCO-submitted files was conducted by requesting a small validation sample of the paper claims and subsequent documentation generated by the claim adjudication process. Each MCO was supplied with the claim numbers for a sample of 30 claims indicated by the MCO to have been submitted to the MCO for payment in a paper (non-electronic) format. Required date stamps and EOB/Remittance Advice dates were matched to the data sets submitted by the MCOs.

Results of the data validation activities conducted are summarized in Table A-6. A notation of “met” indicates that the EQRO determined that the MCO-submitted data set was within the acceptable range. Expected ranges for the volume of claims data and the proportion of CMS 1500 and UB 92 forms were derived from MCO-submitted Semi-annual Claims Data Filing Forms and the HealthChoice MCO average (as calculated by the EQRO), respectively.

Table A-6. Validity of MCO-Submitted Claims Data

Data Validation Activity	MCO						
	AGM	DIA	HFC	JMS	MPC	PPMCO	UHC
Actual Claims Volume Within 10% of Expected Volume	Met	Met	Met	Met	Met	Met	Met
Proportion of CMS 1500 Claims and UB 92 Claims is Reasonable	Met	Met	Met	Met	Met	Met	Met
Validation Sample Data Correspond to Data Submitted	Met	Met	Met	Met	Met	Met	Met