

## Opportunities and Challenges in Medicaid Managed Care: The Experience in Maryland

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### **Abstract**

**Objective:** The effects of the Maryland Medicaid mandatory managed care programs on Medicaid beneficiaries are examined with the main objective of gaining insight into the initial experience and beneficiary satisfaction with Maryland's Medicaid program. The background of the Maryland Medicaid system, initial implementation, results of beneficiary satisfaction surveys, and future concerns are discussed.

**Study Design:** An observational study based on survey data.

**Data and Methods:** Beneficiary surveys mailed to adult and child participants in HealthChoice and the Rare and Expensive Case Management (REM) Medicaid programs in Maryland are analyzed. Descriptive univariate and bivariate data statistics are used.

**Results:** The 4 questions rating satisfaction with primary care provider (PCP), relevant specialists, all providers, and the overall health plan indicate high levels of satisfaction in both adult and child populations.

**Conclusions:** The Maryland Medicaid programs appear to have met the goal of providing a comprehensive, coordinated healthcare system of quality

care during their first year of operation. The satisfaction of these beneficiaries suggests that with an appropriate risk-adjusted capitation approach, managed care organizations (MCOs) can successfully provide for even the most complex needs of Medicaid members.

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Managed care has increasingly become the norm for healthcare delivery in the United States. As with the private sector, the massive shift in recent years of many Medicaid programs from fee-for-service to capitated managed care has been prompted largely by efforts to contain Medicaid expenditures. In July 1997, Maryland initiated HealthChoice, a statewide program that shifted the majority of the state's Medicaid population to mandatory managed care. The Rare and Expensive Case Management (REM) program was also implemented at this time. These ambitious programs were expected not only to constrain Medicaid spending but also to yield improved access and quality of care.

This dynamic environment in Maryland provides a unique opportunity to examine the effects of mandated managed care on the Medicaid beneficiaries as well as healthcare providers and managed care organizations (MCOs). Maryland's unique payment mechanism incorporates risk-adjusted capitated payments to MCOs participating in the Medicaid system. Risk adjustment is a major issue in managed care payments and could have a significant

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impact on potential underservice of some higher-cost members.

With the mandatory assignment of almost all Medicaid beneficiaries, including the chronically ill and disabled, monitoring quality of care is essential. A recent 5-state survey found that managed care for low-income Medicaid populations in those states was not associated with improved access to care and that Medicaid managed care enrollees were more likely to be less satisfied than their fee-for-service counterparts.<sup>1</sup> These results highlight the challenges of moving Medicaid beneficiaries into managed care plans and the need for monitoring quality of care provided by MCOs.

Accordingly, this article focuses on the initial experience and beneficiary satisfaction with Maryland's Medicaid program. The main objective is to gain insight into the effectiveness of a mandatory managed care program with risk-adjusted capitation rates in a budget-constrained environment. This material lays the groundwork for future analyses of various aspects of the HealthChoice and REM programs from the perspectives of different stakeholder groups.

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... BACKGROUND ...

### Medicaid and Managed Care

In response to increasing demands for services and accelerating costs, states are rapidly moving Medicaid-eligible individuals into managed care programs. In 1991, only 9.5% of Medicaid recipients were enrolled in managed care programs; by 1997, this number increased to 47.8%.<sup>2</sup> The shift to managed care has occurred predominantly among women and children of the former Aid to Families With Dependent Children (AFDC) population.

At the end of 1997, 29 states and the District of Columbia had more than 50% of the Medicaid enrollees in managed care plans, while only 8 states had less than 25% of enrollees in these plans. At that time, Maryland was 1 of the 12 states with more than 75% of Medicaid enrollees in a managed care plan.<sup>2</sup> In June 1997, 568 Medicaid managed care plans were in operation in the United States, with the majority of these being full-risk MCOs.<sup>2</sup>

The objective of any managed care program is to provide cost-effective healthcare. To be effective, these programs involve decisions across a spectrum of care rather than episodic care. The MCOs consider the cost/benefit ratio of alternatives and focus on managing health rather than treating sickness. Although states employ a number of Medicaid man-

aged care models, 3 common elements are generally involved: enrollment of eligible individuals with MCOs; contractual agreements among providers, the state (as payer), and the MCOs; and substantial service utilization management by the state.

This shift to managed care is drastically changing the structure and style of Medicaid programs that have traditionally operated in a fee-for-service environment. Many MCOs that are participating in these programs have limited experience in serving the low-income and disabled populations. In addition, many of the state agencies charged with overseeing the Medicaid programs lack experience with managed care. The major challenge to the states and the MCOs in a Medicaid system is in assuring appropriate levels of service utilization while controlling the total Medicaid expenditures.

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... DEVELOPMENT OF MARYLAND'S MEDICAID  
MANAGED CARE PROGRAM ...

The reliance on managed care for Maryland's Medicaid recipients grew measurably with passage by the State Legislature of Senate Bill 750 in April 1996. The focal point of that legislation was the mandate to Maryland's Department of Health and Mental Hygiene (DHMH) to create a medical home for Medicaid recipients through which all medical care would be delivered. The legislative goal was to provide a comprehensive, prevention-oriented system of quality care that would facilitate more predictable expenditures while being cost effective.

On May 3, 1996, the Maryland Department of Health and Mental Hygiene submitted the Medicaid 1115 Waiver request to the Health Care Financing Administration (HCFA), seeking approval to implement a mandatory, statewide managed care program for Medicaid recipients. Approval for the waiver was granted on October 30, 1996, with the demonstration to begin June 2, 1997.<sup>3</sup>

The waiver request was based on a doubling of Maryland's Medicaid costs from 1989 to 1994 and the forecast that state and federal funds would not be available to sustain this rate of growth. In addition, it was Maryland's experience that care was poorly coordinated for the sickest and most costly patients.<sup>4</sup> This was particularly true for those who did not have a designated "medical home" (ie, a single entity responsible for providing and coordinating the full range of needed health services). By allowing MCOs flexibility for innovation and by holding MCOs accountable for care quality, the state expect-

ed to reduce Medicaid costs while improving access and quality of care.<sup>4</sup>

In designing the waiver for HealthChoice, Maryland focused on several key points, including:

- Healthcare will be patient-focused; the patient should have a medical home and have sufficient information to allow informed choice among competing MCOs
- Healthcare systems will be comprehensive and prevention oriented to avoid cost shifting and perverse incentives
- MCOs will be accountable for high quality of care
- The system will provide better value for Maryland's healthcare dollar.

The new HealthChoice program replaced a less comprehensive application of managed care programs for the state's Medicaid patients. Since 1975, the Maryland medical assistance program had contracted with health maintenance organizations (HMOs) to provide Medicaid services to those who enrolled voluntarily. Through the 1970s and 1980s, though, availability of HMOs was limited mainly to Baltimore residents. Between 1988 and 1995, an HMO option became available statewide, resulting in increased enrollments and additional HMOs becoming Medicaid providers. In May 1997, 5 HMOs serving approximately 126,000 people voluntarily enrolled Medicaid beneficiaries in Maryland.<sup>4</sup> As a percent of the total Medicaid population, voluntary HMO enrollment in Maryland was third highest in the nation, with only California and Oregon having higher rates.<sup>5</sup>

In addition, Maryland had instituted a primary case management program (PCCM), Maryland Access to Care (MAC), in 1991. Under MAC, each Medicaid recipient was assigned to a primary care provider (PCP) who acted as a gatekeeper. This practitioner generally delivered preventive and basic treatment and referred the patient to a specialist when medically appropriate and necessary.<sup>6</sup> The goals of the program were to reduce Medicaid expenditures by improving access to primary and preventive care, improving continuity of care, and eliminating the inappropriate use of emergency and specialty services. Within a year after initiation, this program covered 330,000 individuals (approximately 70% of the Medicaid-eligible population).<sup>3</sup>

Under MAC, PCPs were reimbursed on a fee-for-service basis. Although modest savings were achieved with this program, no incentives were provided for PCPs to limit the volume of their services

or referrals. Increased cost savings as well as integration of the existing set of programs was envisioned in the new Section 1115 Waiver proposal. This comprehensive Medicaid reform initiative provided the opportunity to consolidate existing HMO operations, the MAC program, and several specialized waiver programs into a single capitated managed care program for the majority of Medicaid beneficiaries.

One unique dimension of Maryland's Medicaid program is the risk-adjusted capitated payment system. This is designed to adequately compensate MCOs for providing services to Medicaid members with above-average expected costs. A large proportion of disabled persons are covered by Medicaid, and it is therefore critical that this public payer provide sufficient incentives for health plans to develop systems of care responsive to their special needs. HealthChoice is one of the first Medicaid programs in the country to employ a diagnosis-related risk-adjusted capitation system for its entire Medicaid population. A major purpose of this approach is to encourage participating MCOs to develop high quality responsive care for individuals with disabilities.

Maryland's Medicaid program is also distinguished in the treatment of Medicaid beneficiaries with rare and expensive medical conditions. The REM program is designed for beneficiaries with any of 22 specific diagnoses, including cystic fibrosis, spina bifida, hemophilia, pediatric symptomatic HIV disease/AIDS, and phenylketonuria. The REM population was defined based on the following criteria. The condition:

- Occurs rarely (affects fewer than 300 individuals throughout the state per year)
- Is expensive (costs more than \$10,000 per year)
- Requires highly specialized providers/delivery system
- Has an increased risk for negative outcomes without proper care.

Rather than being enrolled in MCOs, individuals in the REM program are placed in a case management program that provides specialized services on a fee-for-service basis. These individuals receive the services of a case manager who works with multidisciplinary teams to develop a plan of care, coordinate and monitor services, address changing needs, and recommend transfer out of the REM program when appropriate.

### Implementation of HealthChoice

Through HealthChoice, the DHMH contracts on a capitated basis with MCOs to provide comprehen-

sive systems of care for Medicaid recipients.<sup>4</sup> Payment rates were defined using a patient case-mix grouping methodology developed at The Johns Hopkins University School of Public Health.<sup>7</sup> The Ambulatory Care Groups (ACG) Case-Mix Adjustment system categorizes patients based on their diseases and treatments for these diseases

using claims and healthcare encounter data derived from both ambulatory and inpatient settings. The patient case-mix groups have been shown to be highly predictive of healthcare resource consumption.<sup>8,9</sup>

The ACG patient groups were used in Maryland to define 9 risk-adjusted categories (RACs) for nondisabled and 9 RACs for disabled individuals.

Per-member per-month (PMPM) rates were set for each RAC and further differentiated for Baltimore and the rest of the state. When data for previous utilization was available, a Medicaid beneficiary was assigned to a specific RAC and the state made monthly payments to the MCO at the specified RAC rate. If no previous data were available for an individual, the patient's capitation rate was based only on age, gender, and residence.<sup>10</sup> Risk-adjusted capitation rates were expected to provide sufficient incentives for the MCOs to deliver a level of service appropriate for each individual member.

A discussion with Katherine Tvaronas, a staff specialist for HMO programs from the Maryland Department of Health and Mental Hygiene Medical Care Policy Administration, (November 1997) revealed that initially 13 MCOs applied for participation in

**Table 1.** A Review of Benefits Offered by the 9 Managed Care Organizations (MCOs) Participating in the HealthChoice Program

<p><b>Basic Benefits</b> Medicaid medical benefits and children's dental and vision benefits are the same as fee-for-service benefits.</p> <p><b>Service Area</b> The MCO coverage area ranged from one plan covering only Baltimore to one plan that covers the entire state. Two additional plans covered all but one county. The median service area includes 14 counties. All plans (with the exception of the smallest) include the Baltimore metropolitan area.</p> <p><b>Primary Care Location</b> Primary care is provided in private doctors' offices and clinics for all plans. Seven of the nine plans also provide primary care in outpatient hospital settings.</p> <p><b>Pharmacy Network</b> The network included as few as 6 and as many as 22 pharmacy chains, with a median of 16. All but 2 MCOs include some independent pharmacies.</p> <p><b>Adult Dental Benefits</b> Coverage ranges from a minimum of an oral examination and cleaning once a year with fillings as needed to twice a year with X rays, filling, simple extractions, and anesthesia as needed. The norm is oral examination and cleaning twice a year with X rays, extractions, and fillings as needed. Dentures are provided by one plan.</p> <p><b>Adult Vision Benefits</b> Minimum coverage by the MCOs is an eye examination every year with glasses every 2 years as opposed to Medicaid's fee-for-service coverage of a vision examination every 2 years. Some MCOs expand the minimum coverage to include a replacement pair of glasses once within the 2-year period or to reimburse for new glasses every year. Only one MCO offers necessary surgical and advanced subspecialty vision care.</p> <p><b>Other Benefits Not Covered by Medicaid</b> One plan offers adult chiropractic benefits while another offers routine podiatry care. A third plan covers certain over-the-counter drugs with a doctor's order.</p> <p><b>Transportation Assistance</b> In addition to state and county provision of transportation, 7 of the 9 plans offer bus tokens when medically necessary. Van or taxi service is provided when necessary by 6 MCOs.</p> <p><b>Member Service Hours</b> All MCOs operate traditional business hours on weekdays with most also having extended hours on these days. Saturday hours are offered by 3 plans, one of which also offers Sunday hours.</p> <p><b>Languages Spoken by Providers</b> In addition to English, the number of languages offered ranges from a low of 4 to a high of 27. The median is 16.</p> <p><b>Medical Advice Telephone Line</b> Seven of the nine MCOs offer 24-hour medical advice lines.</p>
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the HealthChoice program. Nine of these MCOs were approved by DHMH, including 6 HMOs, 2 hospital-based plans, and 1 physician network. Three of the participating MCOs were traditional HMOs with commercial populations, while the other 6 were created specifically for the Medicaid market. Although all 9 MCOs provide the required health services, the plans have notable differences in benefits, particularly in dental and vision benefits, as outlined in Table 1. The plans also differ in customer services, such as the size of the pharmacy network, availability of transportation assistance, and availability of providers who speak languages other than English.

Mandatory enrollment of 330,000 Maryland Medicaid beneficiaries with the 9 approved MCOs began on June 2, 1997. This involved a 6-month phase-in period, with one sixth of the beneficiaries randomly selected for enrollment each month. Individuals eligible for both Medicare and Medicaid, institutionalized Medicaid beneficiaries, women enrolled in the Family Planning Waiver, and recipients of the Senior Assisted Housing Waiver were all exempt from mandatory enrollment.

Beneficiaries were permitted to choose among 2 or more MCOs. Auto-enrollment, the process by which individuals who do not voluntarily choose an MCO are assigned by the state, is a necessity in any mandatory managed care system. The assignment is based on the beneficiary's previous PCP, if known, and otherwise is made randomly. Beneficiaries are permitted to change MCO enrollment during the first 90 days following enrollment without cause, at every 12 months thereafter, and at any time with good reason.

Of the 303,249 enrollees in HealthChoice in May 1998, approximately 40% were auto-enrolled. The majority of the enrollees are mothers and children. Three traditional MCOs had an ongoing relationship with the state and have the largest number of enrollees. FreeState, which is owned by Blue Cross and Blue Shield of Maryland, has 77,609 enrollees. Prudential has 75,692 enrollees, and United Health Care has 55,237 enrollees. The largest new MCO is Priority Partners, owned by Johns Hopkins Hospital and a group of community health centers, with 34,711 enrollees.<sup>11</sup> According to Linda Lee, the chief of the Program Services and Review Division of the Maryland Department of Health and Mental Hygiene (personal communication, December 1998), in addition to the HealthChoice enrollees, 515 recipients were enrolled in the REM program by September 1998.

## ...ASSESSING BENEFICIARY SATISFACTION ...

### Surveys of Participants

Included in the conditions of the 1115 Waiver was the requirement that Maryland develop and maintain an overall quality monitoring plan for MCOs participating in HealthChoice. As part of this quality monitoring program, separate beneficiary satisfaction surveys for adults and children in the HealthChoice and REM programs were mailed to participants. A sample of 5400 children and 3600 adults in HealthChoice and 850 children and 143 adults in REM, stratified by MCO, was selected to receive the survey. This sample was drawn from the population of all HealthChoice beneficiaries who had been enrolled for at least 6 months and from REM participants who had been enrolled for a minimum of 3 months. These samples included beneficiaries enrolled with 8 of the 9 participating MCOs across all geographic areas of Maryland. One MCO was not surveyed because of late program participation.

The surveys were conducted during the summer of 1998. Recipients received an introductory letter explaining the survey and the questionnaires were mailed 2 weeks later. Nonrespondents were mailed a reminder letter and a second copy of the survey instrument. The Consumer Assessment of Health Plans Study (CAHPS) Adult and Child Medicaid Managed Care Surveys developed by Rand, the Research Triangle Institute, and Harvard University (with modifications) were used to assess enrollee satisfaction with various aspects of the HealthChoice program. This included access to providers, access to emergency care, access and quality for special populations, and education/outreach.<sup>12</sup> To assure nonduplication of responses, only 1 member of a household was surveyed.

Responses were obtained from 1306 adult (36.3%) and 1424 child (26.4%) HealthChoice surveyed participants, and from 73 adult (51%) and 366 child (43%) REM surveyed beneficiaries. While these response rates are not as high as for some studies of commercial managed care populations, given the profile of the Medicaid population and the lengthy survey instrument, these rates were considered quite good. Moreover, because of the large number of observations in this study, the response rates do not pose a serious limitation on the analysis.

Table 2 presents data comparing MCO, age, race, gender, and county characteristics for the Medicaid adult survey respondents and nonrespondents. For this population as well as the other survey popula-

tions, no significant differences are noted between the respondents and nonrespondents except for the age of HealthChoice respondents (which tends to be older than nonrespondents) and gender (with a slightly greater proportion of females among the Healthchoice respondents).

**Overall Satisfaction**

Using a scale of 0 to 10, where 0 is the worst possible rating and 10 is the best possible rating, beneficiaries were asked to rate satisfaction with their PCP, relevant specialists, all providers, and the overall health plan. Responses in the 0 to 3 range are

considered LOW, responses of 4 to 7 are considered MODERATE, and responses of 8 to 10 are considered HIGH. Results of these 4 satisfaction measures are summarized in Table 3.

Responses from participants in the REM program indicate the special requirements of this population are being addressed successfully. More than 80% of adults and 85% of child respondents rated their PCP in the HIGH category. In addition, nearly 85% of adults and 88% of child respondents rated their specialists in the HIGH category.

For the HealthChoice program, about 76% of adults and 84% of child respondents rated satisfac-

tion with their PCP in the HIGH category. For specialists, the HIGH category included 74% of adult and 72% of child respondents. These data indicate no statistically significant differences in the level of satisfaction between adult and child respondents in either the HealthChoice or REM programs for either PCPs or specialists.

Satisfaction levels with all providers are also quite high for both HealthChoice and REM programs (67% to 87% in the HIGH range), and with the overall health plans (58% to 80% in the HIGH range). With the exception of satisfaction with PCPs, tests of statistical significance indicate satisfaction within the REM program is higher than in HealthChoice for both adult and child participants ( $P < .05$ ).

**Access to Services and Providers**

Beneficiaries were asked questions designed to measure whether they were able to get routine and acute care as soon as was desired and whether they were able to get advice from providers without a long wait. HealthChoice adult enrollees

**Table 2.** Demographic Data of Respondents vs Nonrespondents for HealthChoice Adult Survey

	Respondents (%)	Nonrespondents (%)
<b>Geographical Location</b>		
County A	9.5	9.8
County B	5.5	5.1
County C	21.0	25.9
County D	56.0	49.0
County E	9.0	10.0
All other counties	<1.0	<1.0
<b>Race</b>		
White	65	65
Black	35	35
<b>Sex*</b>		
Male	24.4	36
Female	75.6	64
<b>Age*</b>		
18-24	7	15
25-34	22	26
35-44	25	21
45-54	21	16
55-64	19	14
65-74	3	5
75+	.6	3
<b>MCO</b>		
A	19	14
B	6	5
C	16	14
D	5	5
E	3	5
F	14	10
G	15	19
H	23	26

\* $P < .10$

always (51%) or usually (26%) got appointments as soon as they wished. For child enrollees, the comparable values were 63% and 21%, respectively.

For the REM population, 88% of adult respondents and 89% of child respondents were satisfied with the frequency of case manager contacts. In addition, 79% of both adult and child respondents indicated that case managers were always or usually as helpful as they should be. Further, 71% of respondents indicated that case managers always or usually addressed their illness.

Health Choice enrollees also described how they were able to obtain a specialist referral if necessary and obtain other tests and treatments when needed. For both adult and child recipients, 77% reported obtaining referrals when needed. In addition, 58% reported “always” and 17% “usually” getting the tests or treatments they thought they needed.

**Education and Outreach**

Health education is an important part of an MCO’s responsibility to provide preventive healthcare. Adult and child enrollees described being encouraged to exercise or eat healthy diets (51% and 49%,

**Table 3.** Beneficiary Satisfaction

<b>Satisfaction with Primary Care Provider*</b>				
	<b>Healthchoice Population</b>		<b>REM Population</b>	
	<b>Adult (N = 958)</b>	<b>Child (N = 1132)</b>	<b>Adult (N = 61)</b>	<b>Child (N = 306)</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
HIGH <sup>†</sup>	726 (75.8)	954 (84.3)	49 (80.3)	261 (85.3)
MODERATE	190 (19.8)	155 (13.7)	12 (19.7)	44 (14.4)
LOW	42 (4.4)	23 (2.0)	0	1 (0.3)
<b>Satisfaction with Specialists<sup>‡§</sup></b>				
	<b>Healthchoice Population</b>		<b>REM Population</b>	
	<b>Adult (N = 577)</b>	<b>Child (N = 438)</b>	<b>Adult (N = 58)</b>	<b>Child (N = 247)</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
HIGH <sup>†</sup>	424 (73.5)	317 (72.4)	49 (84.5)	217 (87.9)
MODERATE	127 (22.0)	100 (22.8)	9 (15.5)	28 (11.3)
LOW	26 (4.5)	21 (4.8)	0	2 (0.8)
<b>Satisfaction with all Providers<sup>§,  </sup></b>				
	<b>Healthchoice Population</b>		<b>REM Population</b>	
	<b>Adult (N = 1050)</b>	<b>Child (N = 1152)</b>	<b>Adult (N = 65)</b>	<b>Child (N = 308)</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
HIGH <sup>†</sup>	703 (67.0)	919 (79.8)	56 (86.2)	269 (87.3)
MODERATE	294 (28.0)	210 (18.2)	8 (12.3)	37 (12.0)
LOW	53 (5.0)	23 (2.0)	1 (1.5)	2 (0.6)
<b>Satisfaction with MCO or REM Plan<sup>§,¶</sup></b>				
	<b>Healthchoice Population</b>		<b>REM Population</b>	
	<b>Adult (N = 1206)</b>	<b>Child (N = 1361)</b>	<b>Adult (N = 68)</b>	<b>Child (N = 345)</b>
	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>	<b>n (%)</b>
HIGH <sup>†</sup>	707 (58.6)	853 (62.7)	50 (73.5)	277 (80.3)
MODERATE	429 (35.5)	403 (29.6)	17 (25.0)	62 (18.0)
LOW	70 (5.8)	105 (7.7)	1 (1.5)	6 (1.7)

\*Actual wording of question: We want to know your rating of your personal doctor or nurse. Use any number on a scale from 0 to 10 where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible. How would you rate your personal doctor or nurse now?

†On a scale of 0 to 10, HIGH represents a response ≥ 8, MODERATE represents a response of 4-7, and LOW represents a response of 0-3.

‡Actual wording of question: We want to know your rating of the specialist you saw most often in the last 6 months. Use any number on a scale from 0 to 10 where 0 is the worst specialist possible and 10 is the best specialist possible. How would you rate the specialist?

§Chi square analyses collapsing MODERATE and LOW responses, P<.05 for comparisons between HealthChoice Adult vs REM Adult, and between HealthChoice Child vs REM Child.

||Actual wording of question: We want to know your rating of all your healthcare in the last 6 months from all doctors and other health professionals. Use any number on a scale from 0 to 10 where 0 is the worst healthcare possible, and 10 is the best healthcare possible. How would you rate your healthcare?

¶Actual wording of question: We want to know your rating of all your experience with your health insurance plan. Use any number on a scale from 0 to 10 where 0 is the worst health insurance plan possible and 10 is the best health insurance plan possible. How would you rate your health insurance plan now?

respectively). Further, 36% of adult and 17% of child enrollees in HealthChoice acknowledged receiving educational materials about the dangers of smoking or using tobacco products, and 20% of adult and 16% of child enrollees received educational materials on drug and alcohol abuse.

### First-Year Assessment

For the first year of operation, the HealthChoice and REM programs appear to have met the goal of providing a comprehensive, patient-focused, coordinated healthcare system of quality care. It is important to note that surveys were conducted after only 9 months of program implementation, while some transition programs were still in development; thus, results may not completely reflect the program capabilities. For example, preliminary analysis of health education activities suggests that these activities are not as pervasive as would be anticipated in a health delivery system focused on prevention as a means to achieve long-term cost savings,<sup>13</sup> but the survey findings may be more reflective of the effects of transition than of the actual service provided.

A recent national study by the National Research Corporation (NRC) provides a benchmark to compare the beneficiary satisfaction of HealthChoice and REM participants. Using data collected from consumer surveys of 165,000 households representing more than 400,000 commercially insured lives, NRC measured overall satisfaction with managed care plans in markets with differing rates of HMO penetration. The average response rate for these commercial plans was 65%, with the results indicating that 56% to 64% of members were completely or very satisfied with their plans.<sup>14</sup> Overall satisfaction rates with HealthChoice (59% to 63%) are comparable to the commercial plans, while satisfaction rates for REM (74% to 80%) are substantially higher.

Although the data on satisfaction are on a par with commercial experience nationally, it is not possible with these data to determine with certainty the effect of Maryland's new Medicaid program on beneficiary satisfaction rates. Several factors may explain the Maryland experience. One important factor is the use of risk-adjusted capitation rates that provide differential PMPM payments to MCOs providing services for the more costly beneficiaries. The satisfaction of these beneficiaries suggests that participating MCOs did not "skimp" on services because of inadequate payments by the state. Although other states have mandated managed care for their Medicaid recipients, those states have predominantly enrolled the AFDC and related populations rather than the disabled or older

Medicare dually eligible populations.<sup>15</sup> Maryland's experience indicates that with an appropriate risk-adjusted capitation approach, payments to MCOs are sufficient to assure that needs of these individuals with more complex medical issues will be met.

A second contributing factor is the distinctive feature of the Maryland Medicaid program that gives extraordinary attention to serving the needs of members with rare and expensive conditions.<sup>3</sup> These beneficiaries are often eligible for optional services that are outside the state plan benefits, such as acupuncture and private duty nursing. These optional services are available through the recommendation of the REM case manager following a complete assessment and consultation with a multidisciplinary team. The REM program case managers are required to conduct one-on-one on-site assessments for each REM recipient and develop a detailed plan of care. As a result of this planning, the case manager is able to coordinate all types of care as well as provide individualized education regarding specific conditions and preventive measures for complications.

Another important aspect of the Maryland program is the emphasis on continuity of service. In most cases, REM beneficiaries continued with providers and specialists with whom they had developed close relationships in the past. The REM participants have the advantage of a case manager who is an expert in complex medical conditions and who provides ongoing counsel and education regarding the availability and judicious use of services to meet all of an individual's health needs. While REM participants represent less than 1% of the Maryland Medicaid population, their special needs present particularly difficult challenges for the system. The results of this member satisfaction survey suggest the needs of this population are being addressed successfully.

In contrast to the case manager approach taken with REM, HealthChoice participants are mandated to first select an MCO and then to choose a PCP within that MCO's network, subject to availability. With this approach, many HealthChoice beneficiaries were able to maintain their previous provider relationships. If, however, a particular provider was not in the network of a participating MCO, continuity of previous relationships would not be maintained. For beneficiaries who were auto-enrolled whose provider preferences were frequently not known, maintaining previous provider relationships was more difficult. The surveys indicate that choice did, in fact, influence the satisfaction of

HealthChoice beneficiaries. While initial analyses suggest that satisfaction with PCPs was not significantly associated with whether beneficiaries chose the specific PCP, choice of PCP did significantly influence satisfaction with the plan in which they were enrolled ( $P=.01$ ). Also, those who chose their PCP changed doctors fewer times in the preceding 6 months than those who did not choose their PCP ( $P=.01$ ). Being offered the choice of healthcare plans and exercising that choice appears to be a positive factor in satisfaction of participants for both the PCP and the plan ( $P=.01$  and  $P=.001$ ).

### Ongoing Analysis

The primary goal of the Maryland Department of Health and Mental Hygiene is to integrate the evaluation of other quality assurance and improvement activities with these enrollee satisfaction surveys. The Department has designed a comprehensive monitoring strategy for assessing the impact of HealthChoice on Medicaid recipients. In support of quality improvement activities, a critical issue involves developing a data warehouse that will contain Medicaid claims, participant eligibility, and provider files in a uniform format for additional future analytic work. This data warehouse will eventually provide an expanded set of utilization data, including hospital discharge data and other data such as vital statistics, to support analysis of MCO performance. With valid ambulatory and inpatient encounter data, the state can assess changes in morbidity and determine how this relates to other factors, such as changes in access. For example, the impact of access to specialty services can be related to clinical as well as satisfaction outcome measures once valid data are available.

The data demands to facilitate these types of analyses are substantial. Further, the capabilities of management information systems vary across the participating MCOs in Maryland. Thus, the first steps require agreement on the design of a standard set of structure, process, and outcome variables that can be used to describe, evaluate, and compare MCO performance. The process of implementing uniform data collection as well as developing and applying performance measures will be ongoing.

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### ... FUTURE CONCERNS AND RESEARCH ISSUES ...

The DHMH believes the survey results suggest Maryland's HealthChoice and REM programs should be interpreted to show good performance. In addi-

tion to achieving high levels of satisfaction among beneficiaries, state officials believe the programs have been cost effective, at least in the short term. This is based on capitated rates equal to 90% of what the state would expect to pay in a fee-for-service environment.

Because this is the first year of a planned multi-year study, opportunities are available to refine the study design for future years, and this issue is being addressed in several ways. For example, preliminary analysis indicates that there were variations in satisfaction by plan during the first year. The validity and consistency of this finding will be evaluated further as data from the second year become available. Another refinement has been made with the sample for the second year, which has been stratified not only by MCO but also by county of residence. This will further ensure that the sample is apportioned across counties relative to the number of Medicaid beneficiaries.

The rapid movement to Medicaid managed care in Maryland created opportunities for the entrance of new MCOs, including some with limited experience in developing and operating effective delivery systems for the Medicaid population. Meeting the requirements of the HealthChoice program creates a significant challenge for participating MCOs as these organizations work with thousands of new members and with issues they may not have faced previously.

Moreover, much of the savings to date in Medicaid cost is associated with the rates paid to the MCOs being less than those paid by other payers. The capitated rates must be sufficient to assure continued participation by MCOs in the system. If the payments to MCOs are reduced below a level sufficient to cover costs of providing services, many MCOs will simply withdraw from participation in the Medicaid system.

A significant challenge for the state is not only in keeping MCOs in the system, but also in assuring access and quality of care for Medicaid participants. Of particular concern is that a fully capitated model can contribute to access problems and potential limitation in services. Although the general accounting office has no evidence that this occurs, the point is acknowledged that in contrast to fee-for-service care, where the incentive is to oversupply services to increase revenues, the fixed payment system of capitated managed care contains incentives to provide fewer services to maximize short-term profits.<sup>16</sup> With that point in mind, the experience of the Maryland program in the first year suggests that the diagnosis-related, risk-adjusted capitation rates

have worked to ensure access and to encourage MCOs to develop high quality programs for Medicaid beneficiaries.

As Maryland moves into the future years of caring for its Medicaid population through a mandated managed care system, innovation, new processes, and stronger oversight will be required. Oversight is needed to determine the extent to which eligibility and enrollment systems operate smoothly, as well as the extent to which responsive service and delivery systems are developed by the MCOs participating in HealthChoice. The Maryland financing methodology has the potential to encourage MCOs to develop innovative approaches to coordinate care for chronically ill and disabled Medicaid beneficiaries. As with all managed care plans, the issue of reimbursement rates is complex and negotiations of appropriate rate adjustments are ongoing. As these approaches evolve, attention should be focused on developing and implementing specific quality measures appropriate for healthcare provided in various settings for special needs populations.

The Maryland HealthChoice program presents tremendous opportunities for both continuous improvement in the healthcare for Medicaid beneficiaries and containment of costs of providing that care. This program also presents formidable challenges for the state, the MCOs, and the providers. Continuing collection and analysis of the Maryland HealthChoice data will provide important information in understanding how the system is working and in identifying opportunities for improvement in content and process. The plan at this time is to identify and focus on a number of key issues as the new system matures.

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