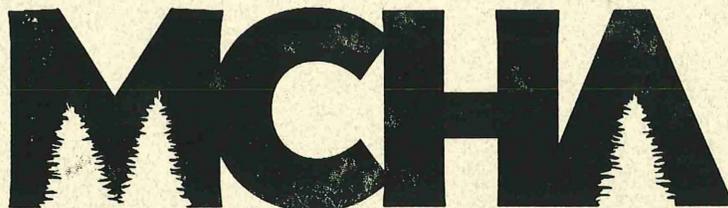


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**Report to the Legislature**

**A Study on the Impact of Changing MCHA  
Out-of-Pocket Expense Maximum  
and  
Premium Structure**

**March 2001**

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## **EXECUTIVE SUMMARY**

### **BACKGROUND**

In 1976, the Minnesota Legislature passed a law enabling the Minnesota Comprehensive Health Association (MCHA) to be established. MCHA is a nonprofit, privately operated Minnesota corporation selling policies of individual health insurance to residents of Minnesota who have been turned down for commercial health insurance due to preexisting conditions. In January 2001, 26,000 Minnesotans were insured through MCHA. Over the past 24 years, MCHA has provided health insurance to over 250,000 Minnesotans.

Premiums charged to policyholders are generally higher than the average, comparable commercial policy; up to a maximum of 125% of market rates. Premium revenue produces approximately 50% of the funding needed to operate the MCHA program. Expenses that exceed premium revenue are paid through an assessment to insurers and organizations selling insured health and accident products in Minnesota. The amount of assessment each “contributing member” company pays is in direct proportion to its share of total health and accident premium earned in Minnesota in the year. The assessment dollars are passed on to purchasers of insured health benefit products – generally to small businesses and individuals who buy individual health insurance, and also those midsize and large businesses that purchase insured health benefits. Due to the Employee Retirement Income Security Act (ERISA) corporations and nongovernmental, nonchurch organizations that are self-funded for health benefits are exempt from insurance laws affected their health plans, including the MCHA assessment.

Many market, economic, and legislative changes have occurred since MCHA was established two decades years ago. These changes necessitate an examination of the entire MCHA program, including: funding (premiums and payment of plan losses), benefits, network design, and relationship to Minnesota’s public and private insurance programs in the context of Minnesota’s entire health benefits landscape.

### **PREMIUM STUDY**

During the 2000 session, the Minnesota Legislature mandated that a “study of premiums” be performed by MCHA. The recent legislative enactment requires MCHA’s study to examine the impact of:

- Increasing MCHA’s annual out-of-pocket (OOP) expense maximum,
- Increasing the high end of the premium range maximum, and,
- Implementing a sliding scale premium based on policyholder income.

## METHODOLOGY

In order to measure potential impact to MCHA enrollees of modeled changes to the premium rates and annual out-of-pocket (OOP) expense maximum, MCHA conducted a survey of the economic status of MCHA enrollees in Fall 2000. Nearly 2,400 MCHA enrollees completed the survey questionnaire; an 81% response rate. Data about enrollees' 1999 household income were collected and analyzed. Income is depicted as a percent of the Federal Poverty Guideline (FPG). Table 8 and Figure 1, in the full report, display the distribution of MCHA enrollees by income.

MCHA engaged the actuarial firm Reden & Anders, Ltd. (R&A) to perform the study required by the Legislature. A complete copy of R&A's report has been included in the Appendix to this report. For the study, R&A looked at MCHA premium costs for all four health plans, and MCHA OOP expenses for the non-Medicare plans. Analyses of these costs were performed by grouping MCHA enrollees into four household income categories:

- Category I – Under 175% Federal Poverty Guideline (FPG)
- Category II – 175 to 274% FPG
- Category III – 275 to 399% FPG
- Category IV – 400% FPG and over

MCHA OOP expenses for each non-Medicare enrollee was simulated using the 1999 (preaudit) distributions of Plan One and Plan Two claims. Four new scenarios of premium levels and one increased OOP maximum level were modeled. Results of the impact on MCHA plan assessments (losses), membership (increases and decreases), and percentage of enrollee income contributed toward premium and OOP expenses were produced.

## FINDINGS

Data presented are *estimates only*. Findings are based on MCHA enrollee self-reported survey data and actuarial modeling techniques. The results of the various scenarios are academic in nature as they are not subject to actual market dynamics.

### The economic survey results reveal:

- 71% of enrollees reported 1999 household income at or less than 400% of FPG (one person = \$32,976, two person = \$44,256). Minnesota's 1999 median household income approximates 400% of FPG.
- 10% of enrollees reported income at or above 600% of FPG (one person = \$49,464, two person = \$66,384), with 1% of enrollees reporting income at or above 1000% of FPG (one person = \$82,440, two person = \$110,640).

### The results of the actuarial models, summarized in Table 1, reveal:

- **Increasing Annual Out-of-Pocket (OOP) Maximum from \$3,000 to \$5,000 – Plans One and Two (R&A Scenario 1B)**  
Assessment to contributing member companies would be reduced by \$1.2 million (2%), and would affect 600 enrollee cancellations (3%). The percentage of income spent on MCHA premiums would decrease slightly. Enrollees in Plans One and Two in FPG Category I would spend between 15 and 16% of their income on MCHA premiums; enrollees in Category II would spend about 9%, Category III about 6%; and Category IV about 3%. (Refer to Table 13, in full report, for premium/income comparison to current \$3,000 OOP benefit structure for Plans One and Two alone.)

## FINDINGS (continued)

The results of the actuarial models, summarized in Table 1, reveal:

- **Increasing Premium Range Maximum to 150% – All Enrollees (R&A Scenario 2)**  
Assessment to contributing member companies would be reduced by \$8.8 million (16%), and would affect more than 3,000 enrollee cancellations (13%). All enrollees would spend more of their income on premiums in this scenario. Enrollees in FPG Category I would spend between 11 and 30% of their income on MCHA premiums; enrollees in Category II would spend between 7 and 20%; Category III between 5 and 13%; and Category IV between 2 and 6%.
- **Sliding Scale Premiums – All Enrollees (R&A Scenarios 3-5)**  
Of the sliding scale scenarios, assessment to contributing member companies would be reduced the greatest in Scenario 5 in which the maximum premium would be set at 150%, and premiums for FPG Categories I and II would remain at the current 125%. The reduction in assessment would be \$4.4 million (8%). Additional administrative costs, however, would be incurred due to the need to income test more than 12,000 MCHA enrollees. Scenario 5 would affect 1,400 enrollee cancellations (6%). Enrollees in FPG Category I would spend between 9 and 25% of their income on MCHA premiums; enrollees in Category II would spend between 6 and 16%; Category III between 5 and 13%; and Category IV between 2 and 6%.

## RECOMMENDATIONS

1. *No Legislative changes are recommended based on the study results, at this time. Legislative changes, based on the actuarial models presented in the report, would be premature for two reasons.*
  - *First, the data in MCHA's study should be shared, reviewed, and discussed by Administration officials and Legislators in the larger context of the interplay between Minnesota's private health insurance market and Minnesota's existing public programs.*
  - *Second, any change in enrollee premium structure involving income testing would require additional administrative costs to MCHA.*
2. *The MCHA program should be examined in its entirety in the context of market, economic, and public program changes that have occurred in the last 24 years.*
3. *A starting point for the discussion could be the potential eligibility for MinnesotaCare of a portion of the MCHA group. MinnesotaCare's four-month waiting period, and \$10,000 cap on inpatient hospital coverage, are barriers for potential enrollment by some of MCHA's lower income enrollees.*
4. *In cooperation with the Minnesota Departments of Health and Human Services, MCHA needs to educate its enrollees about the available public programs that could better fit both their healthcare and financial needs.*

**EXECUTIVE SUMMARY (continued)**

**Table 1: Premium and Out-of-Pocket (OOP) Modeling\*†**

	IMPACT TO MCHA ENROLLEES		IMPACT TO MCHA	
	Membership	Percentage of Income Spent on Premium (by FPG Income Category)	Assessment to Contributing Member Companies	Enrollees Potentially Requesting Income Testing
<b>CURRENT STATUS: PREMIUM RANGE MAXIMUM 125%; OOP MAXIMUM \$3,000</b>				
<b>SCENARIO 1</b> All Premiums = 125% OOP Maximum = \$3,000	25,426	Cat I: 9-25% Cat II: 6-16% Cat III: 4-11% Cat IV: 2-5%	\$54,463,163	Nonapplicable
<b>INCREASING OOP MAXIMUM TO FROM \$3,000 TO \$5,000 – PLANS ONE AND TWO</b>				
<b>SCENARIO 1B</b> All Premiums = 125% OOP Maximum = \$5,000	24,793 (-633)  % Change -2.5%	Plans One & Two Only Cat I: 15-16% Cat II: 9% Cat III: 6% Cat IV: 3%	\$53,219,628 (-1,243,535)  % Change -2.3%	Nonapplicable
<b>INCREASING PREMIUM RANGE MAXIMUM TO 150% – ALL ENROLLEES</b>				
<b>SCENARIO 2</b> All Premiums = 150% OOP Maximum = \$3,000	22,046 (-3,380)  % Change -13.1%	Cat I: 11-30% Cat II: 7-20% Cat III: 5-13% Cat IV: 2-6%	\$45,674,441 (-\$8,788,722)  % Change -16.1	Nonapplicable
<b>IMPLEMENTING SLIDING SCALE PREMIUMS – ALL ENROLLEES</b>				
<b>SCENARIO 3</b> Maximum Premiums = 150% Sliding Scale Premiums: • Category I: Premium=110% • Category II: Premium=120% • Category III: Premium=135% OOP Maximum = \$3,000	25,631 (+205)  % Change +0.8%	Cat I: 8-22% Cat II: 6-16% Cat III: 4-11% Cat IV: 2-6%	53,623,927 (-\$839,234)  % Change -1.5%	17,896
<b>SCENARIO 4</b> Maximum Premiums = 125% Sliding Scale Premiums: • Category I: Premium=110% OOP Maximum = \$3,000	26,319 (+893)  % Change +3.5%	Cat I: 8-22% Cat II: 6-16% Cat III: 4-11% Cat IV: 2-5%	\$56,391,458 (+\$1,928,295)  % Change +3.5%	6,193
<b>SCENARIO 5</b> Maximum Premiums = 150% Sliding Scale Premiums: • Category I: Premium=125% • Category II: Premium=125% OOP Maximum = \$3,000	23,987 (-1,429)  % Change -5.7%	Cat I: 9-25% Cat II: 6-16% Cat III: 5-13% Cat IV: 2-6%	\$50,100,303 (-\$4,362,860)  % Change -8.0%	12,513

\*Data presented are estimates only. Findings are based on MCHA enrollee self-reported data and actuarial modeling techniques.

†Based on calendar year 1999 enrollment and premium costs trended to year 2000.

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# I INTRODUCTION

## **MCHA BACKGROUND**

The Minnesota Comprehensive Health Association (MCHA) was established in 1976 by the Minnesota Legislature as a nonprofit corporation operated privately to fulfill a public purpose. MCHA's purpose is to offer individual policies of health insurance to Minnesota residents who have been turned down for insurance in the commercial market due to preexisting conditions. (MCHA is referred to as the Minnesota "high-risk pool.") In January 2001 nearly 26,000 Minnesotans were insured through MCHA. Over the past 24 years, MCHA has provided health insurance to over 250,000 Minnesotans.

Unlike a standard commercial insured group, that contains many healthy enrollees with no or low claims, MCHA's membership experiences a higher percentage of enrollees with high medical costs. MCHA's premiums are not income tested, nor is the premium rate structure related to the claims experience of MCHA enrollees. Premiums are charged according to the MCHA plan purchased and the age cell of the insured. Premiums charged to policyholders are generally higher than the average, comparable commercial policy, up to a maximum of 125% of market rates. Premium revenue produces approximately 50% of the funding needed to operate the MCHA program. Expenses that exceed premium revenue are paid through an assessment to insurers and organizations selling insured health and accident products in Minnesota. The amount of assessment each "contributing member" company pays is in direct proportion to its share of total health and accident premium earned in Minnesota in the year. The assessment dollars are passed on to purchasers of insured health benefit products – generally to small businesses and individuals who buy individual health insurance, and also those midsize and large businesses that purchase insured health benefits. Due to the Employee Retirement Income Security Act (ERISA) corporations and nongovernmental, nonchurch organizations that are self-funded for health benefits are exempt from insurance laws affected their health plans, including the MCHA assessment.

Many market, economic, and legislative changes have occurred since MCHA was established two decades ago. These changes necessitate an examination of the entire MCHA program, including: funding (premiums and payment of plan losses), benefits, network design, relationship to Minnesota's public and private insurance programs in the context of Minnesota's entire health benefits landscape.

## **PURPOSE OF STUDY**

Governor Ventura signed legislation directing MCHA to submit to the Legislature and the Commissioner of Commerce, a study on the:

- Impact of changing the annual out-of-pocket (OOP) expense limitation;
- Impact of increasing the maximum premium range of the plans that the association offers to above 125 percent of the weighted average of rates charged in the individual market for similar plans; and
- Feasibility of establishing a sliding scale premium program for policyholders.

## **PURPOSE OF STUDY (continued)**

MCHA became operational in 1977. For 24 years, the risk pool's premium rate structure has been based on the average rate of comparable individual policies sold by Minnesota's commercial market, with specific MCHA rates organized by age and product chosen, with no reference to policyholders' income. Through the years, the average age of the MCHA enrollee has increased to 50. The cost of health care and prescription drugs has increased dramatically driving commercial market premiums up and driving MCHA premiums up beyond the commercial market average. A portion of the MCHA membership has expressed difficulty paying the increasing cost of their health insurance premiums. At the same time, some policymakers have questioned whether enrollees with high incomes should be paying more than 125% of market for their MCHA insurance.

This study on premiums is the first ever analysis of MCHA's premium rates in relation to enrollee income and financial impact on MCHA. The study was prepared by the actuarial firm of Reden and Anders (R&A) and includes a scenario on increasing the OOP maximum, and four scenarios on various premium rate structures.

Section II of this document provides economic information on the MCHA membership. In order to complete a study related to MCHA premium rates, MCHA conducted a socioeconomic survey during the fall of year 2000. One of the most striking findings from the survey is the substantial proportion of enrollees (37%) reporting 1999 household incomes at or less than 200% of the Federal Poverty Guideline (FPG) (one person  $\leq$  \$16,488; two person  $\leq$  \$22,128). Another 34% of the membership reported household incomes between 200 and 400% of FPG (400% FPG: one person = \$32,976; two person = \$44,256). The median household income in Minnesota for 1999 approximates 400% of FPG. MCHA's data indicate that 71% of its membership have household incomes less than the State median income.

This study of MCHA premium/out-of-pocket models is a starting point for a broader discussion of MCHA's role within Minnesota's private/public healthcare market of the new millennium.

II

**ECONOMIC STATUS OF MCHA ENROLLEES**

In order to complete a study related to MCHA premium rates, MCHA conducted a survey during the fall of year 2000 to gain information on the economic status of its enrollees. MCHA received guidance from staff from the departments of health economics from both the University of Minnesota and the Minnesota Department of Health. Their assistance was used in the development of a socioeconomic questionnaire, the strategy enabling the random sampling of 3,000 MCHA enrollees across the four MCHA health plans, and the analysis of the survey data.

Of the 2,943 questionnaires sent and applicable for inclusion in the survey, 2,393 questionnaires were returned. This number of returned questionnaires represents an 81.3% response rate. Response rate by health plan is displayed in Table 2.

**Table 2. Response Rate by Health Plan**

	<b>Plan One</b> (\$1,000 Deductible)	<b>Plan Two</b> (\$500 Deductible)	<b>Medicare</b> <b>Ext. Basic</b>	<b>Medicare Basic</b>
<b>Questionnaires Sent</b>	1,039	987	484	433
<b>Questionnaires Returned</b>	866	759	401	367
<b>Response Rate</b>	83.3%	76.9%	82.9%	84.8%

**SURVEY RESPONDENTS IN RELATION TO MCHA POPULATION**

In the socioeconomic questionnaire sent to MCHA enrollees, enrollees were asked about their calendar year 1999 household income. In order to be consistent with the income data, 1999 membership and claims data were used in the premium study.

MCHA premium rates vary by health plan chosen, and for the non-Medicare plans, by age. Table 3 displays the 1999 distribution of MCHA population by health plan, and then the distribution of survey respondents. (In order to have a sufficient number of Medicare supplement respondents for statistical analysis, enrollees in this population were oversampled.) Table 4 displays the 1999 mean age of MCHA enrollees by health plan, and then mean age of respondents.

Aggregate findings of the socioeconomic survey are reported using a statistical weighting. Weighting of survey data, in relation to full MCHA enrollee population, enables reporting that more closely reflects overall MCHA membership.

**Table 3. Health Plan Distribution**

	<b>All Plans</b>	<b>Plan One</b> (\$1,000 Deductible)	<b>Plan Two</b> (\$500 Deductible)	<b>Medicare</b> <b>Ext. Basic</b>	<b>Medicare Basic</b>
<b>1999 MCHA Membership</b>	25,426 (100%)	11,721 (46.1%)	9,378 (37.3%)	2,934 (11.5%)	1,393 (5.5%)
<b>Survey Respondents</b>	2,393 (100%)	866 (36.2%)	759 (31.7%)	401 (16.8%)	367 (15.3%)

**Table 4. Mean Age in Years**

	<b>All Plans</b>	<b>Plan One</b> (\$1,000 Deductible)	<b>Plan Two</b> (\$500 Deductible)	<b>Medicare</b> <b>Ext. Basic</b>	<b>Medicare Basic</b>
<b>1999 MCHA Membership</b>	50.5	49.7	41.9	71.2	72.7
<b>Survey Respondents</b>	56.0	52.0	44.8	70.9	71.8

## KEY FINDINGS

### MCHA Premium Payment

As shown in Table 5, 94% of MCHA enrollees pay their own premiums.

**Table 5. Who Pays Premium**

<b>Enrollee Pays All:</b> 94%	<b>Social Service:</b> 1%
<b>Employer Pays All:</b> 3%	<b>Other:</b> 1%
<b>Enrollee Pays Part/ Employer Pays Part</b> 1%	

### Household Income

Nearly 80% of MCHA enrollees are of one- or two-person households (Table 6). Table 8 and Figure 1 display the modeled distribution of the 1999 household incomes of MCHA's 25,426 enrollees in relation to the 1999 Federal Poverty Guideline (FPG). Data presented are estimates only. Findings are based on MCHA enrollee self-reported data.\*

As shown in Figure 1, 37% of enrollees reported incomes at or less than 200% of FPG (one person ≤ \$16,488; two person ≤ \$22,128). Another 34% of the membership reported incomes between 200 and 400% of FPG (400% FPG: one person = \$32,976; two person = \$44,256). Only 1% of MCHA's membership reported incomes at or greater than 1000% of FPG (one person ≥ \$82,440; two person ≥ \$110,640).

The median household income in Minnesota for 1999 approximates 400% of FPG (Table 7). MCHA survey data indicates that 71% of its membership have household incomes lower than the State median income.

**Table 6. Household Size**

<b>One Person:</b> 33%	<b>Four Person:</b> 7%
<b>Two Person:</b> 46%	<b>Five Person:</b> 3%
<b>Three Person:</b> 10%	<b>Six or More Person:</b> 1%

**Table 7. Median FPG Level: Approximate 1999 Minnesota Level in Relation to 1999 MCHA Enrollee Level by Health Plan**

Minnesota <sup>†</sup>	MCHA			
	Plan One (\$1,000 Deductible)	Plan Two (\$500 Deductible)	Medicare Ext. Basic	Medicare Basic
400%	252%	303%	182%	182%

<sup>†</sup>Source: Current Population Survey; US Bureau of the Census, March 2000 (Minnesota median income of family of four = \$67,140).

\*Income survey question: "In calendar year 1999, what was your total household income from all sources (for example from wages, social security benefits, and/or veteran's benefits)? (Mark one)

UNDER \$10,000,  \$10,000 - \$20,000,  \$20,000 - \$30,000 . . .  \$90,000 - \$100,000,  OVER \$100,000  
('Total household income' refers to income of all individuals of your household including those that are not enrolled in MCHA)"

**KEY FINDINGS (continued)**

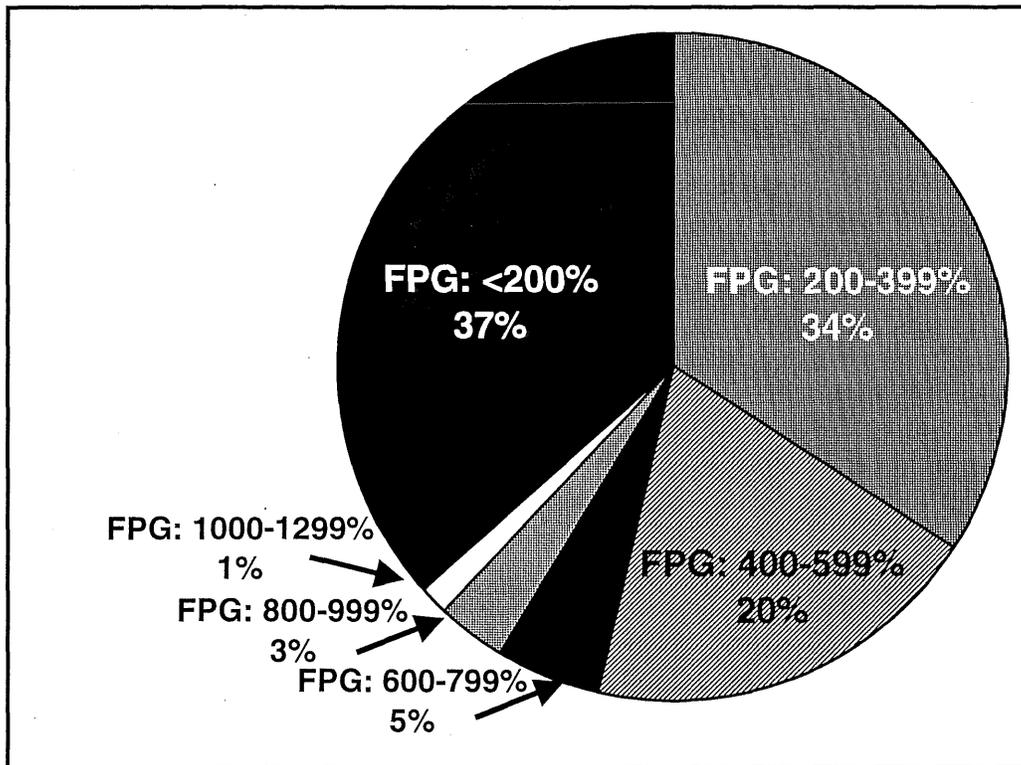
**Household Income**

**Table 8. 1999 Federal Poverty Guideline (FPG): Percentage of MCHA Enrollees at FPG Levels and Corresponding Household Incomes\***

1999 FPG	Percent	Cumulative Percent	1999 Household Income	
			One Person	Two Person
<100%	4.6%	4.6%	<\$8,244	<\$11,064
100-199%	32.1%	36.7%	\$8,244	\$11,064
200-299%	17.0%	53.7%	\$16,488	\$22,128
300-399%	17.1%	70.8%	\$24,732	\$33,192
400-499%	14.1%	84.9%	\$32,976	\$44,256
500-599%	5.6%	90.5%	\$41,220	\$55,320
600-699%	3.0%	93.5%	\$49,464	\$66,384
700-799%	1.8%	95.3%	\$57,708	\$77,448
800-899%	0.4%	95.7%	\$65,952	\$88,512
900-999%	3.0%	98.7%	\$74,196	\$99,576
1000-1099%	0.3%	99.0%	\$82,440	\$110,640
1100-1199%	0.5%	99.5%	\$90,684	\$121,704
1200-1299%	0.6%	100.0%	\$98,928	\$132,768

\*Data presented are estimates only. Findings are based on MCHA enrollee self-reported data.

**Figure 1. Percentage of MCHA Enrollees at FPG Levels\***



\*Data presented are estimates only. Findings are based on MCHA enrollee self-reported data.

**KEY FINDINGS (continued)**

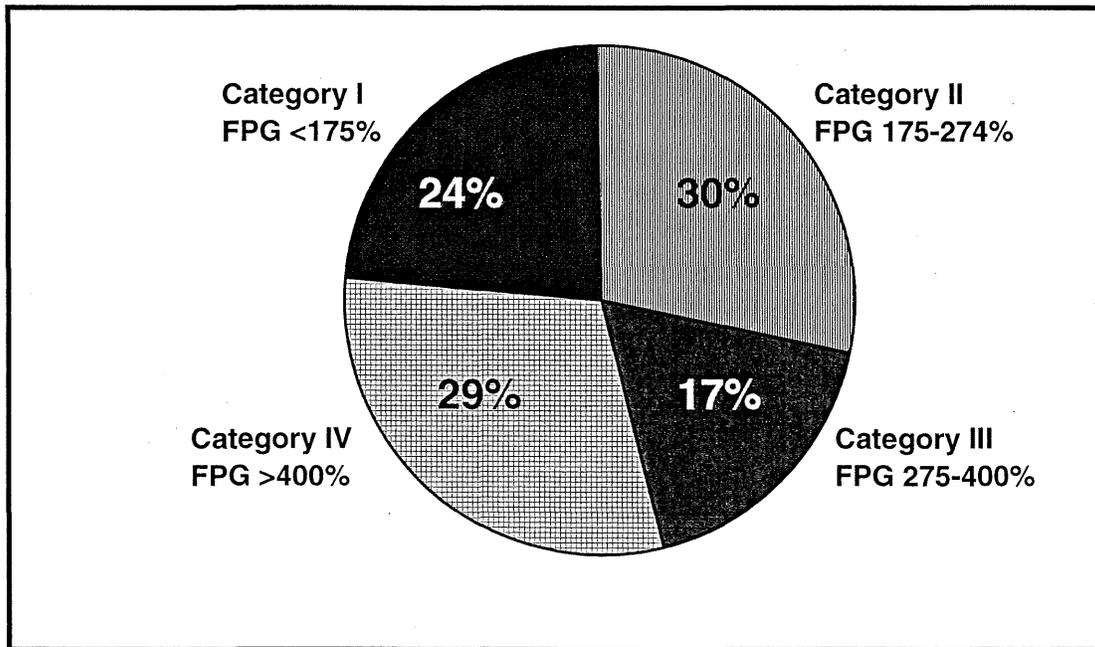
**Household Income**

In order to study the impact of changing MCHA premiums by varying amounts, the MCHA population was grouped into four income categories. Table 9 displays the categories used in these analyses in relation to 1999 FPG Levels. Figure 2 displays the modeled distribution of 25,426 MCHA enrollees across their 1999 income categories.

**Table 9. Income Category in Relation to 1999 FPG Level**

Income Category	1999 FPG	1999 Household Income	
		One Person Household	Two Person Household
I	<175%	<\$14,427	<\$19,362
II	175-274%	\$14,427 to \$22,671	\$19,362 to \$30,426
III	275-400%	\$22,671 to \$32,976	\$30,426 to \$44,256
IV	>400%	>\$32,976	>\$44,256

**Figure 2. Distribution of MCHA Enrollees Across 1999 FPG Income Categories\***



\*Data presented are estimates only. Findings are based on MCHA enrollee self-reported data.

### III

## IMPACT OF CHANGING MCHA OUT-OF-POCKET EXPENSE MAXIMUM AND PREMIUM STRUCTURE

### ACTUARIAL ANALYSIS

The Appendix contains the actuarial report prepared by the firm of Reden and Anders on the impact of changing MCHA's out-of-pocket (OOP) expense maximum and its premium structure. (Table 4 of the actuarial report summarizes the financial impact of these potential changes.)

Data presented are *estimates only*. Findings are based on MCHA enrollee self-reported survey data and actuarial modeling techniques. The results of the various scenarios are academic in nature as they are not subject to actual market dynamics.

This section of the MCHA report, provides key findings of the actuarial analysis. MCHA survey data were used to determine the split of the total MCHA population into four income categories based on Federal Poverty Guidelines (FPG) (Table 9, Figure 2). Enrollees reported household income for 1999 and household size were drawn from the survey data. Income was trended by 5% to project year 2000 incomes, and 2000 FPG percentages were recalculated based on the 2000 FPG. Age and health plan of survey respondents were used to determine calendar year 2000 premium costs.

As reference, Table 10 displays the scenarios related to potential changes in MCHA's OOP expense maximum and premium structure modeled.

**Table 10. MCHA OOP and Premium Scenarios Modeled**

Scenario 1	Current Status – Premium Rates 125% of Market
Scenario 1B	Increasing Annual OOP Expense Maximum to \$5,000 – Plans One and Two
Scenario 2	Increasing Premium Range Maximum to 150% – All Enrollees
Scenarios 3-5	Implementing Sliding Scale Premiums – All Enrollees

**CURRENT STATUS – PREMIUM RATES 125% OF MARKET (Tables 11 and 12)**  
**Scenario 1: Reden and Anders Report**

Scenario 1 presents the current premium status in which premiums are set at the maximum of 125% of average market rates.

- Enrollment was 25,426.
- Assessment to contributing member companies was \$54,463,163.
- Enrollees in FPG Category I would spend between 9 and 25% of their income on MCHA premiums; enrollees in Category II would spend between 6 and 16%; Category III between 4 and 11%; and Category IV between 2 and 5% (Tables 11 and 12).

**Table 11. Scenario 1: Current Status – Premium Rates 125% of Market**

	IMPACT TO MCHA ENROLLEES		IMPACT TO MCHA
	Membership	Percentage of Income Spent on Premium (by FPG Income Category)	Assessment to Contributing Member Companies
<b>SCENARIO 1</b> <b>Current Status</b>  <b>All Premiums = 125%</b> <b>OOP Maximum = \$3,000</b>	25,426	Cat I: 9.0-25.3% Cat II: 5.8-16.2% Cat III: 3.8-10.6% Cat IV: 1.9-5.3%	\$54,463,163

**Table 12. Scenario I: Current Status – Premium Rates 125% of Market**  
**Percent of MCHA Enrollee Income Spent on Premium – Grouped by FPG Income Category**

CATEGORY I FPG <175%	
Health Plan	Percent of Income Spent on Premium
Plan One (\$1,000 Deductible)	15.8%
Plan Two (\$500 Deductible)	16.3%
Extended Basic Medicare Sup.	25.3%
Basic Medicare Sup.	9.0%

CATEGORY II FPG 175-274%	
Health Plan	Percent of Income Spent on Premium
Plan One (\$1,000 Deductible)	9.3%
Plan Two (\$500 Deductible)	9.6%
Extended Basic Medicare Sup.	16.2%
Basic Medicare Sup.	5.8%

CATEGORY III FPG 275-400%	
Health Plan	Percent of Income Spent on Premium
Plan One (\$1,000 Deductible)	6.6%
Plan Two (\$500 Deductible)	6.2%
Extended Basic Medicare Sup.	10.6%
Basic Medicare Sup.	3.8%

CATEGORY IV FPG >400%	
Health Plan	Percent of Income Spent on Premium
Plan One (\$1,000 Deductible)	3.5%
Plan Two (\$500 Deductible)	3.6%
Extended Basic Medicare Sup.	5.3%
Basic Medicare Sup.	1.9%

**INCREASING ANNUAL OUT-OF-POCKET EXPENSE MAXIMUM TO \$5,000 –  
PLANS ONE AND TWO (Table 13)  
Scenario 1B: Reden and Anders Report**

Scenario 1B models the impact of raising the OOP limit from \$3,000 to \$5,000 for Plans One and Two using the current premium rate of 125% of the market average rates.

- Changing the OOP limit to \$5,000 would produce a \$1,243,535 (2.3%) reduction in the overall MCHA assessment to contributing member companies, and would affect 600 (2.5%) enrollee cancellations.
- The percentage of income spent on MCHA premiums would decrease slightly for Plans One and Two. Enrollees in Plans One and Two in FPG Category I would spend between 15 and 16% of their income on MCHA premiums; enrollees in Category II would spend about 9%; Category III about 6%; and Category IV about 3%.

**Table 13. Scenario 1B: Increasing Annual OOP Expense Maximum to \$5,000 – Plans One and Two**

	IMPACT TO MCHA ENROLLEES		IMPACT TO MCHA
	Membership	Percentage of Income Spent on Premium* (by FPG Income Category)	Assessment to Contributing Member Companies
<b>SCENARIO 1 Current Status</b>  <b>All Premiums = 125% OOP Maximum = \$3,000</b>	25,426	Cat I: 15.8-16.3% Cat II: 9.3-9.6% Cat III: 6.2-6.6% Cat IV: 3.5-3.6%	\$54,463,163
<b>SCENARIO 1B</b>  <b>All Premiums = 125% OOP Maximum = \$5,000</b>	24,793 (-633)  % Change -2.5%	Cat I: 15.3-15.9% Cat II: 9.0-9.3% Cat III: 6.1-6.4% Cat IV: 3.4-3.5%	\$53,219,628 (-1,243,535)  % Change -2.3%

\*Plans One and Two Only

**INCREASING PREMIUM RANGE MAXIMUM TO 150% – ALL ENROLLEES  
(Table 14)**

**Scenario 2: Reden and Anders Report**

Scenario 2 models an increase in the premium range, for all MCHA enrollees, from 125% of market average rates, to 150%.

- This scenario would produce a \$8,788,722 (16.1%) reduction in the overall MCHA assessment to contributing member companies.
- The cancellation rates, however, are projected to be high (3,380 enrollees). Although the dollar amount of premiums paid increased more than any other scenario, claims incurred decreased due to the projected cancellations.
- All enrollees would spend more of their income on premiums in this scenario. Enrollees in FPG Category I would spend between 11 and 30% of their income on MCHA premiums; enrollees in Category II would spend between 7 and 20%; Category III between 5 and 13%; and Category IV between 2 and 6%.

**Table 14. Scenario 2: Increasing Premium Range Maximum to 150% – All Enrollees**

	IMPACT TO MCHA ENROLLEES		IMPACT TO MCHA
	Membership	Percentage of Income Spent on Premium (by FPG Income Category)	Assessment to Contributing Member Companies
<b>SCENARIO 1</b> <b>Current Status</b>  <b>All Premiums = 125%</b> <b>OOP Maximum = \$3,000</b>	25,426	Cat I: 9.0-25.3% Cat II: 5.8-16.2% Cat III: 3.8-10.6% Cat IV: 1.9-5.3%	\$54,463,163
<b>SCENARIO 2</b>  <b>All Premiums = 150%</b> <b>OOP Maximum = \$3,000</b>	22,046 (-3,380)  % Change -13.1%	Cat I: 10.9-30.3% Cat II: 7.0-19.5% Cat III: 4.5-12.7% Cat IV: 2.3-6.4%	\$45,674,441 (-\$8,788,722)  % Change -16.1

## **IMPLEMENTING SLIDING SCALE PREMIUMS – ALL ENROLLEES (Table 15) Scenario 3, 4, and 5: Reden and Anders Report**

### **Scenario 3**

Scenario 3 places the maximum premium at 150% of the market average rates, but decreases the premium rate to 110% for MCHA enrollees with Category I incomes, to 120% for enrollees with Category II incomes, and 135% for enrollees with Category III incomes.

- New business attracted by rate decreases is offset by projected cancellations of enrollees receiving increases. This scenario produces a small reduction of \$839,234 (1.5%) in the assessment to contributing member companies.
- Additional administrative costs would be involved related to the income testing of potentially 17,896 MCHA enrollees.
- Membership would increase by 205 enrollees (0.8%).
- Premiums for enrollees in Category I would spend between 8 and 22%; enrollees in Category II would spend between 6 and 16%; Category III between 4 and 11%; and Category IV between 2 and 6%.

### **Scenario 4**

In Scenario 4 the modeling involves keeping the maximum premium at the current premium rate of 125% of the market average rates, and decreasing the premium rate to 110% for MCHA enrollees with Category I incomes.

- This scenario is the only one to produce an increase in the assessment to contributing member companies (\$1,928,295).
- Additional administrative costs would be involved related to the income testing of potentially 6,193 MCHA enrollees.
- Membership would increase by 893 enrollees (3.5%).
- Enrollees in FPG Category I would spend between 8 and 22% of their income on MCHA premiums; enrollees in Category II would spend between 6 and 16%; Category III between 4 and 11%; and Category IV between 2 and 5%.

### **Scenario 5**

Scenario 5 models increasing the maximum premium to 150% of the market average rates, and keeping the premium rate at the current 125% of the market average rates for MCHA enrollees in both Category I and Category II incomes.

- Although there are projected cancellations (1,429), there is a small net premium increase, and there are fewer claims due to these cancellations. This scenario would produce a \$4,362,860 (8.0%) reduction in the assessment to contributing member companies.
- Additional administrative costs would be involved related to the income testing of potentially 12,513 MCHA enrollees.
- Enrollees in FPG Category I would spend between 9 and 25% of their income on MCHA premiums; enrollees in Category II would spend between 6 and 16%; Category III between 5 and 13%; and Category IV between 2 and 6%.

**IMPLEMENTING SLIDING SCALE PREMIUMS – ALL ENROLLEES (continued)**  
**Scenario 3, 4, and 5: Reden and Anders Report**

**Table 15. Scenarios 3, 4, and 5: Implementing Sliding Scale Premiums – All Enrollees**

	IMPACT TO MCHA ENROLLEES		IMPACT TO MCHA	
	Membership	Percentage of Income Spent on Premium (by FPG Income Category)	Assessment to Contributing Member Companies	Enrollees Potentially Requesting Income Testing
<b>SCENARIO 1</b> <b>Current Status</b>  All Premiums = 125% OOP Maximum = \$3,000	25,426	Cat I: 9.0-25.3% Cat II: 5.8-16.2% Cat III: 3.8-10.6% Cat IV: 1.9-5.3%	\$54,463,163	Nonapplicable
<b>SCENARIO 3</b>  Maximum Premiums = 150% Sliding Scale Premiums: • Category I: Premiums 110% • Category II: Premiums 120% • Category III: Premiums 135% OOP Maximum = \$3,000	25,631 (+205)  % Change +0.8%	Cat I: 8.0-22.3% Cat II: 5.6-15.6% Cat III: 4.1-11.4% Cat IV: 2.3-6.4%	53,623,927 (-\$839,234)  % Change -1.5%	17,896
<b>SCENARIO 4</b>  Maximum Premiums = 125% Sliding Scale Premiums: • Category I: Premiums 110% OOP Maximum = \$3,000	26,319 (+893)  % Change +3.5%	Cat I: 8.0-22.3% Cat II: 5.8-16.2% Cat III: 3.8-10.6% Cat IV: 1.9-5.3%	\$56,391,458 (+\$1,928,295)  % Change +3.5%	6,193
<b>SCENARIO 5</b>  Maximum Premiums = 150% Sliding Scale Premiums: • Category I: Premiums 125% • Category II: Premiums 125% OOP Maximum = \$3,000	23,987 (-1,429)  % Change -5.7%	Cat I: 9.0-25.3% Cat II: 5.8-16.2% Cat III: 4.5-12.7% Cat IV: 2.3-6.4%	\$50,100,303 (-\$4,362,860)  % Change -8.0%	12,513

## IV RECOMMENDATIONS

After carefully considering MCHA's enrollee income data, impact results of four different premium scenarios and a scenario including an increased out-of-pocket limit (summarized in Table 4 of actuarial report in Appendix), the MCHA Board of Directors makes the following recommendations:

1. *No Legislative changes are recommended based on the study results, at this time. Legislative changes, based on the actuarial models presented in the report, would be premature for two reasons.*
  - *First, the data in MCHA's study should be shared, reviewed, and discussed by Administration officials and Legislators in the larger context of the interplay between Minnesota's private health insurance market and Minnesota's existing public programs.*
  - *Second, any change in enrollee premium structure involving income testing would require additional administrative costs to MCHA.*
2. *The MCHA program should be examined in its entirety in the context of market, economic, and public program changes that have occurred in the last 24 years.*
3. *A starting point for the discussion could be the potential eligibility for MinnesotaCare of a portion of the MCHA group. MinnesotaCare's four-month waiting period, and \$10,000 cap on inpatient hospital coverage, are barriers for potential enrollment by some of MCHA's lower income enrollees.*
4. *In cooperation with the Minnesota Departments of Health and Human Services, MCHA needs to educate its enrollees about the available public programs that could better fit both their healthcare and financial needs.*

MCHA needs to be viewed as one small, but important segment of Minnesota's total health coverage continuum. The issues of: access, affordability, methods to stimulate a healthy and competitive commercial market, consumer education about the availability of private and public programs, equity in funding of quasi public health programs such as MCHA, and efficiency in administration must drive the discussion. This report, therefore, should not be read or considered in a vacuum.

**V**  
**APPENDIX**

**Reden and Anders Actuarial Report**



# Minnesota Comprehensive Health Association Premium & Out-of-Pocket Expense Analysis

February 14, 2001

MCHA engaged Reden & Anders, Ltd. (R&A) to perform the study required by Minnesota Statute 62E.18, Section 9, enacted April 14, 2000. The statute requires this study to analyze the following:

1. The financial impact of increasing the maximum premium range above 125% of the weighted average of rates charged in the individual market for similar plans;
2. The feasibility of establishing a sliding scale premium program; and
3. The feasibility of establishing a sliding out-of-pocket (OOP) limit scale.

## EXECUTIVE SUMMARY

MCHA conducted a survey of approximately 10% of its members that shows income, family size, plan, and other information. While there may be some underreporting of income, especially from retirees, we believe this survey is a good representation of the entire MCHA membership by income level and plan.

For this study, we looked at the total MCHA medical expenses (premium plus OOP medical expense) for members in four household income categories: Under 175% of the Federal Poverty Guidelines or FPG (Category I), 175% to 274% (Category II), 275% to 399% (Category III), and 400% and over (Category IV). We simulated out of pocket (OOP) medical expenses for each non-Medicare member in the survey sample, using the 1999 distributions of Plan 1 and Plan 2 claims. The distribution of members by income category and their projected 2000 premiums as percentages of income are shown in Table 1.

TABLE 1 MEMBERSHIP PREMIUMS – MEMBERSHIP AND CURRENT COSTS BY INCOME CATEGORY								
Income Category	Plan 1		Plan 2		MS Extended		MS Basic	
	% of Members	Member Cost						
I	21.1%	15.8%	20.4%	16.3%	33.2%	25.3%	42.8%	9.0%
II	30.3%	9.3%	24.1%	9.6%	32.2%	16.2%	36.9%	5.8%
III	16.3%	6.6%	20.5%	6.2%	16.2%	10.6%	13.0%	3.8%
IV	32.3%	3.5%	35.0%	3.6%	18.4%	5.3%	7.4%	1.9%



Table 2 shows the ratios of the projected 2000 premiums plus OOP medical expenses to income.

Income Category	Plan 1		Plan 2		MS Extended*		MS Basic*	
	% of Members	Member Cost						
I	21.1%	23.1%	20.4%	23.9%	33.2%	25.3%	42.8%	9.0%
II	30.3%	13.6%	24.1%	14.0%	32.2%	16.2%	36.9%	5.8%
III	16.3%	9.4%	20.5%	8.6%	16.2%	10.6%	13.0%	3.8%
IV	32.3%	5.1%	35.0%	5.3%	18.4%	5.3%	7.4%	1.9%

\* For MS Members, the cost percentages are for MCHA premiums only.

We developed five scenarios of premium levels. In addition, we developed 2 scenarios of OOP limits. The first scenario of both premium and OOP limit is the current situation, and the others address the items that the newly enacted statute requires MCHA to analyze:

Scenarios	Income Category			
	I	II	III	IV
1 - Current	125%	125%	125%	125%
2	150%	150%	150%	150%
3	110%	120%	135%	150%
4	110%	125%	125%	125%
5	125%	125%	150%	150%
<b>OOP Limit Options (in combination with current only)</b>				
A - Current	\$3,000	\$3,000	\$3,000	\$3,000
B	\$5,000	\$5,000	\$5,000	\$5,000

We tested each premium scenario with the current benefit plan, but we tested the impact of the OOP limit change only with the current premium scale. We feel the marginal impact of the higher OOP limit with the other premium scenarios would be the same.

Our analysis of the impact of the scenarios includes assumptions regarding new business and cancellations resulting from the changes. A reduction in MCHA premium would bring in new members, and these new members would likely have lower claims than the current MCHA average per member. An increase in MCHA premium or benefit reduction from a higher OOP limit would cause some members to cancel, and these would likely be the members with lower than average claims.

The attached exhibits provide the complete detailed results of the study, which are discussed in more detail later. The following table summarizes the financial impacts of the scenarios.



TABLE 4 SUMMARY OF RESULTS							
Original	1	Changes in	1B [1]	2	3	4	5
Mbr-Months	305,107	Mbr-Months	(7,595)	(40,557)	2,465	10,728	(17,266)
Premium	\$51,932,250	Premium	(\$2,409,602)	\$1,925,274	\$1,564,604	\$144,102	\$1,331,381
Claims	100,682,865	Claims	(3,653,137)	(6,863,448)	725,370	2,072,397	(3,031,478)
Assessment [2]	54,463,163	Assessment [3]	(1,243,535)	(8,788,722)	(839,234)	1,928,295	(4,362,860)

[1] Scenario 1B does not estimate the impact to the Medicare supplement plans.

[2] This is the (positive) amount which MCHA must receive from assessments to offset its loss.

[3] Negative amounts are reductions in the assessment.

## RELIANCES

R&A relied on the following data and information:

1. A database, prepared by MCHA, with data from 2,191 respondents of the Member Survey—Year 2000. These data show, for each survey respondent, the plan, 1999 income as a percentage of the FPG, household size, and age.
2. Distributions by size of 1999 allowed charges for the MCHA non-Medicare Plans 1 and 2, prepared by Blue Cross Blue Shield of Minnesota.
3. 1999 premiums, incurred claims, and member months by plan, from the MCHA financial statement and reserve development detail.
4. Number of subscribers by plan, number of non-Medicare subscribers with dependent child coverage, and number of Basic Medicare Supplement subscribers with various riders. These data come from the rate development process for the July 1, 2000 rates change.

## ANALYSIS STRATEGY & ASSUMPTIONS

We used the member survey data to determine the split of the total MCHA population by income category and to model the impact of premium and plan changes. We found the 1999 household income by survey member using the FPG percentage and household size in the database. We trended these incomes by 5% to project the 2000 incomes and recalculated the 2000 FPG percentages based on the 2000 FPG. Based on the member age and plan in the survey, we determined a 2000 single premium for the member, assuming coverage for a full year. We randomly assigned dependent child coverage and premium to the Plans 1 and 2 survey members. For each Basic Medicare Supplement member in the survey, we found the base plan premium and then increased all members' premiums by 32%, which was the average rider to base premium ratio for 1999.

We did not have actual claims for the members in the survey. Using the 1999 claims distributions trended to 2000, we randomly assigned each survey Plan 1 and 2 member one of 30 levels of allowed charges projected for 2000. This allowed us to simulate OOP expenses for the survey members. We did not have claims distributions for Medicare Supplement members, so we only looked at premium to income ratios for these members.



Using these premiums and allowed charges, we then determined the impact of the various premium and OOP limit changes on the Plans 1 and 2 survey members. The modeling included assumptions of new business and cancellations resulting from the premium and OOP limit changes. Our assumptions are the following:

- New business in an income category will increase by a multiple of in-force policies equal to 125% of the rate decrease. For example, a 12% premium decrease (going to 110% of market average rates) will increase membership by 15% in the income category with the decrease.
- In force business in an income category receiving a rate sliding scale increase will experience a cancellation rate ranging from 50% to 100% times the size of the increase. For example, a 20% rate increase (going to 150% of market average rates) will cause a cancellation rate of 10-30% in the income category with the increase. The cancellation rate depends on the ratios of the current and new premiums to income—the higher the ratios and larger the change in ratios, the higher the cancellation rate. We used MCHA premium at 8.8% of income as a dividing point to determine cancellation rates. This percentage is used to suggest a level at which premium expenses are considered an affordability problem.
- In force business with an OOP limit increase to \$5,000, from the current \$3,000, will experience a 6% cancellation rate. This is approximately two times the actuarial value of the benefit reduction due to the increase.
- Both new and cancelled business are assumed to have lower loss ratios than the MCHA average. Cancellations due to premium or OOP limit increases would come from members who have had lower than average claims. Therefore, we assumed that cancelled members have 50% of the MCHA average loss ratio. Similarly, we assumed that most uninsured individuals with high claims who were eligible for MHCA have already joined. Therefore, for new members, the claims assumption is 60% of the MCHA average loss ratio.

Exhibit B shows the impact of these assumptions on the overall projected new business and cancellations by plan. These new business and cancellation assumptions are based on our experience with commercial products. It is difficult to determine how they would vary for a member population such as MCHA's. The following table shows the projected results, in a format similar to Table 4 above, if we assume 50% higher and 50% lower new business and cancellation rates:

	Scenarios				
	1B	2	3	4	5
<b>Premium Changes</b>					
Tested assumptions	(\$2,409,602)	\$1,925,274	\$1,564,604	\$144,102	\$1,331,381
50% below tested	(1,796,037)	6,155,862	1,731,303	(648,458)	3,179,305
50% above tested	(3,023,166)	(2,305,314)	1,397,906	936,662	(516,543)
<b>Assessment Changes</b>					
Tested assumptions	(1,243,535)	(8,788,722)	(839,234)	1,928,295	(4,362,860)
50% below tested	(1,236,365)	(9,587,586)	(1,368,618)	1,684,657	(4,695,045)
50% above tested	(1,250,706)	(7,989,858)	(309,851)	2,171,933	(4,030,675)



As this table shows, the choice of these assumptions generally has a significant impact on premium, but only a modest impact on the assessment, except for the large assessment impact differences in Scenarios 2 and 3. A lower lapse rate produces a better result (i.e., larger assessment reduction), because this assumes that MCHA will retain more members even after a rate increase or benefit decrease.

We did not assume any member medical premiums or expenses other than those that the member pays in the MCHA plans. We found the average percentage changes in premiums and OOP expense by income category and for all categories combined for the survey members. The projected change in the MCHA assessment equals these average percentage changes in premiums and net benefits under the various scenarios times the 1999 premiums or claims. The change in assessment assumes no changes in MCHA administrative expenses.

For the Medicare Supplement members, we only looked at premium to income ratios. We did not have a Medicare Supplement claims distribution on which to base a projection of the impact of changing the OOP limit.

## **BACKGROUND DATA**

Table 2 above shows that approximately half of the Plan 1 and 2 members and over 2/3 of the Medicare Supplement members have reported incomes under 275% of FPG. We should note that there might be some tendency for survey respondents to understate their incomes. This may be particularly true of Medicare supplement members. Many Medicare supplement members may not have reported all their income in the MCHA survey (e.g., their investment income).

Although the MCHA loss ratios for 1999 were high for all plans, there was still a large number of members in all plans with relatively low claims. For the two non-Medicare plans, 58% of members had total net benefits under \$1,000, and 48% of Plan 1 members and 25% of Plan 2 members did not reach their deductibles in 1999 (\$1,000 for Plan 1, \$500 for Plan 2). Although a large number non-Medicare MCHA members have low medical expenses in a given year, their claims may vary considerably from year to year.

We did not have a full claims distribution for the Medicare supplement members. However, over 30% of them had total 1999 net benefits under \$1,000.

## **RESULTS OF THE ANALYSIS**

Exhibits A.1A through A.5 show the results of the projections. Exhibit A.1A is the current plan with current premiums.

### ***OOP Limit Increase***

In Scenario 1B, we modeled the impact of raising the OOP limit to \$5,000 only on the Plan 1 and 2 membership and with no premium change. Besides not having claims distributions for the Medicare Supplement members, we also do not know how much Medicare pays of their total medical expenses.



This change reduces the assessment for Plans 1 and 2 by 2.6%. It also reduces slightly the affordability of these plans, raising the total MCHA premium plus OOP expense by 0.2% to 0.7% of income for the two lowest income categories.

### ***Premium Range Maximum***

Scenario 2 models an increase to 150% of the market average rates for all members. This scenario produces a 16% overall reduction in the MCHA assessment, by far the largest of the scenarios tested. As shown in Exhibit B, the cancellation rates are projected to be high; this drops the net premium increase well below the nominal 20%. However, the premiums still increase more than in any other scenario, and, of course, there are also fewer claims due to the projected cancellations.

Scenario 2 significantly raises the cost of the plan to members in the two lowest income categories. For members in income Category I, these costs increase by 2% to 5% of income. For members in income Category II, these costs increase by 1.2% to 3.3%. Scenario 2 also increases significantly the percentage of members with premium plus OOP expense at 18% of income, which is double the commonly used affordability level for premium expense.

### ***Sliding Scale Premiums***

Scenarios 3, 4, and 5 model the impact of changing the premiums by varying amounts, depending on the income category of the member. Scenario 4, which has only a premium decrease for income Category I, is the only one to produce an increase in the assessment. This increase arises both from the lower premium and from an influx of new business at a 120% assumed loss ratio. This scenario produces a 1% to 3% lower medical expense to income ratio for Category I members.

Scenario 3 blends rate decreases with increases. As shown in Exhibit B, the new non-Medicare Supplement business attracted by the decreases is mostly offset by projected cancellations of members receiving increases. This scenario produces a small reduction in the assessment and a reduction in the medical expense to income ratio of 1% to 3% of income for Category I members and less than 1% for Category II members.

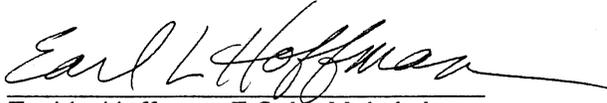
The only change in Scenario 5 is a 20% increase for Categories III and IV. Although there are projected cancellations, there is still a small net premium increase, and, of course, there are fewer claims due to these cancellations. The 8% decrease in the assessment is the second highest among the scenarios we modeled. Since there are no changes for Categories I and II, their medical expense to income ratios do not change. The percentage of members with medical expense over 18% of income changes only slightly.



## SUMMARY

The scenarios we tested have dramatically different impacts on the MHCA assessment, ranging from a 3.5% increase to a 16.1% decrease. The scenarios also show differing affordability levels for the two lowest income categories.

None of the scenarios assumed a change in administrative expense. MCHA should consider what additional expenses it may incur to handle a premium scale that varies by income level, as well as the administrative expense of changing benefit provisions.



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ELH:mjr

February 14, 2001

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## Exhibit A.1A

### Current Situation (Based on 1999 Results)

			MS	MS	Total
	Plan 1	Plan 2	Ext Basic	Basic	
Member-Months	140,647	112,531	35,208	16,721	305,107
Premium	\$23,601,168	\$18,485,574	\$8,379,113	\$1,466,395	\$51,932,250
Claims	\$38,710,560	\$46,479,849	\$13,872,094	\$1,620,362	\$100,682,865
Loss Ratio	164.0%	251.4%	165.6%	110.5%	193.9%
Assessment*	\$17,705,520	\$30,027,688	\$6,414,683	\$315,270	\$54,463,163
MCHA Premium + OOP Expense as % of Income for Members in			**	**	
Income Category I	23.1%	23.9%	25.3%	9.0%	
Income Category II	13.6%	14.0%	16.2%	5.8%	
Percentage of Renewing Members with MCHA Prem + OOP Exp > 18% of Income	25.3%	25.6%	50.3%	0.0%	

\* Assessments are needed to offset MCHA's loss. The loss equals premium minus claims minus 11% of premium for administrative expense. Claims are based on the 12/31/99 reserve calculations. The Assessment is the loss expressed as a positive amount. It may not equal the exact final 1999 Assessment.

\*\* Incomes from survey responses of MS members may be understated. See discussion in report text. For MS members, these percentages are for MCHA premium only.

**Current: \$3,000 OOP limit; premiums at 125% of market average.**



## Exhibit A.1B

### Impact of Scenario 1B Changes

Changes from 1999 Results

	Plan 1	Plan 2	MS Ext Basic	MS Basic	Total
Change in Member-Months	(4,219)	(3,376)	0	0	(7,595)
Percentage Change	-3.0%	-3.0%	0.0%	0.0%	-2.5%
Change in Premium	(\$1,439,965)	(\$969,637)	\$0	\$0	(\$2,409,602)
Percentage Change	-6.1%	-5.2%	0.0%	0.0%	-4.6%
Change in Claims	(\$1,824,526)	(\$1,828,611)	\$0	\$0	(\$3,653,137)
Percentage Change	-4.7%	-3.9%	0.0%	0.0%	-3.6%
New Loss Ratio	166.4%	254.9%	165.6%	110.5%	195.9%
Change in Assessment*	(\$384,561)	(\$858,974)	\$0	\$0	(\$1,243,535)
Percentage Change	-2.2%	-2.9%	0.0%	0.0%	-2.3%
MCHA Premium + OOP Expense Percentage of Income in...			<b>No projection for OOP limit change with MS plans.</b>		
Income Category I	23.8%	24.5%			
Income Category II	13.8%	14.7%			
Percentage of Renewing Members with MCHA Prem + OOP Exp > 18% of Income	26.7%	25.9%			

\* Assumes there is no change in administrative expense.

**Scenario 1B change: OOP limit at \$5,000.**



## Exhibit A.2

### Impact of Scenario 2 Changes

Changes from 1999 Results

	Plan 1	Plan 2	MS Ext Basic	MS Basic	Total
Change in Member-Months	(18,462)	(14,554)	(5,005)	(2,535)	(40,557)
Percentage Change	-13.1%	-12.9%	-14.2%	-15.2%	-13.3%
Change in Premium	\$889,944	\$762,466	\$246,391	\$26,473	\$1,925,274
Percentage Change	3.8%	4.1%	2.9%	1.8%	3.7%
Change in Claims	(\$3,230,470)	(\$2,475,086)	(\$937,204)	(\$220,688)	(\$6,863,448)
Percentage Change	-8.3%	-5.3%	-6.8%	-13.6%	-6.8%
New Loss Ratio	144.9%	228.6%	150.0%	93.8%	174.2%
Change in Assessment*	(\$4,120,414)	(\$3,237,552)	(\$1,183,595)	(\$247,161)	(\$8,788,722)
Percentage Change	-23.3%	-10.8%	-18.5%	-78.4%	-16.1%
MCHA Premium + OOP Expense					
Percentage of Income in...			**	**	
Income Category I	26.2%	27.1%	30.3%	10.9%	
Income Category II	15.5%	16.0%	19.5%	7.0%	
Percentage of Renewing Members with MCHA Prem + OOP Exp > 18% of Income	30.4%	30.2%	50.3%	0.0%	

\* Assumes there is no change in administrative expense.

\*\* Incomes from survey responses of MS members may be understated. See discussion in report text.  
For MS members, these percentages are for MCHA premium only.

**Scenario 2 change: Premiums at 150% of market average.**



## Exhibit A.3

### Impact of Scenario 3 Changes

Changes from 1999 Results

	Plan 1	Plan 2	MS Ext Basic	MS Basic	Total
Change in Member-Months	620	(610)	1,285	1,171	2,465
Percentage Change	0.4%	-0.5%	3.6%	7.0%	0.8%
Change in Premium	\$746,763	\$605,087	\$185,246	\$27,508	\$1,564,604
Percentage Change	3.2%	3.3%	2.2%	1.9%	3.0%
Change in Claims	\$319,274	(\$49,995)	\$327,487	\$128,604	\$725,370
Percentage Change	0.8%	-0.1%	2.4%	7.9%	0.7%
New Loss Ratio	160.3%	243.2%	165.8%	117.1%	189.6%
Change in Assessment*	(\$427,489)	(\$655,082)	\$142,241	\$101,096	(\$839,234)
Percentage Change	-2.4%	-2.2%	2.2%	32.1%	-1.5%
MCHA Premium + OOP Expense					
Percentage of Income in...			**	**	
Income Category I	21.2%	21.9%	22.3%	8.0%	
Income Category II	13.2%	13.7%	15.6%	5.6%	
Percentage of Renewing Members with MCHA Prem + OOP Exp > 18% of Income	23.0%	23.2%	50.3%	0.0%	

\* Assumes there is no change in administrative expense.

\*\* Incomes from survey responses of MS members may be understated. See discussion in report text.  
For MS members, these percentages are for MCHA premium only.

**Scenario 3 change: Premiums at these percentages of market average, by income category:**  
Category I: 110%; Category II: 120%; Category III: 135%; Category IV: 150%



## Exhibit A.4

### Impact of Scenario 4 Changes

Changes from 1999 Results

	Plan 1	Plan 2	MS Ext Basic	MS Basic	Total
Change in Member-Months	4,460	3,439	1,756	1,073	10,728
Percentage Change	3.2%	3.1%	5.0%	6.4%	3.5%
Change in Premium	\$60,690	\$42,459	\$33,426	\$7,527	\$144,102
Percentage Change	0.3%	0.2%	0.4%	0.5%	0.3%
Change in Claims	\$921,349	\$644,585	\$394,481	\$111,983	\$2,072,397
Percentage Change	2.4%	1.4%	2.8%	6.9%	2.1%
New Loss Ratio	167.5%	254.3%	169.6%	117.5%	197.3%
Change in Assessment*	\$860,659	\$602,125	\$361,055	\$104,456	\$1,928,295
Percentage Change	4.9%	2.0%	5.6%	33.1%	3.5%
MCHA Premium + OOP Expense					
Percentage of Income in...			**	**	
Income Category I	21.2%	21.9%	22.3%	8.0%	
Income Category II	13.6%	14.0%	16.2%	5.8%	
Percentage of Renewing Members with MCHA Prem + OOP Exp > 18% of Income	23.4%	23.4%	50.3%	0.0%	

\* Assumes there is no change in administrative expense.

\*\* Incomes from survey responses of MS members may be understated. See discussion in report text.  
For MS members, these percentages are for MCHA premium only.

**Scenario 4 change: Premium for income Category I at 110% of market average.**



## Exhibit A.5

### Impact of Scenario 5 Changes

Changes from 1999 Results

	Plan 1	Plan 2	MS Ext Basic	MS Basic	Total
Change in Member-Months	(8,154)	(7,220)	(1,551)	(340)	(17,266)
Percentage Change	-5.8%	-6.4%	-4.4%	-2.0%	-5.7%
Change in Premium	\$592,307	\$578,414	\$136,783	\$23,878	\$1,331,381
Percentage Change	2.5%	3.1%	1.6%	1.6%	2.6%
Change in Claims	(\$1,433,041)	(\$1,280,240)	(\$290,426)	(\$27,771)	(\$3,031,478)
Percentage Change	-3.7%	-2.8%	-2.1%	-1.7%	-3.0%
New Loss Ratio	154.1%	237.1%	159.5%	106.9%	183.3%
Change in Assessment*	(\$2,025,348)	(\$1,858,654)	(\$427,210)	(\$51,649)	(\$4,362,860)
Percentage Change	-11.4%	-6.2%	-6.7%	-16.4%	-8.0%
MCHA Premium + OOP Expense					
Percentage of Income in...					
Income Category I	23.1%	23.9%	25.3%	9.0%	
Income Category II	13.6%	14.0%	16.2%	5.8%	
Percentage of Renewing			**	**	
Members with MCHA Prem					
+ OOP Exp > 18% of Income	25.6%	26.5%	50.3%	0.0%	

\* Assumes there is no change in administrative expense.

\*\* Incomes from survey responses of MS members may be understated. See discussion in report text.  
For MS members, these percentages are for MCHA premium only.

**Scenario 5 change: Premiums for income Categories III and IV at 150% of market average.**



## Exhibit B

### New Business & Cancellations--Impact of Assumptions

Increase in Members due to Lower Rates*					
	Scenario 1B	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Plan 1	0.0%	0.0%	4.7%	3.2%	0.0%
Plan 2	0.0%	0.0%	4.3%	3.1%	0.0%
MS Ext Basic	no projection	0.0%	6.6%	5.0%	0.0%
MS Basic	no projection	0.0%	8.3%	6.4%	0.0%
Members Canceling Due to Rate Increases*					
	Scenario 1B	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Plan 1	-3.0%	-13.1%	-4.2%	0.0%	-5.8%
Plan 2	-3.0%	-12.9%	-4.8%	0.0%	-6.4%
MS Ext Basic	no projection	-14.2%	-2.9%	0.0%	-4.4%
MS Basic	no projection	-15.2%	-1.3%	0.0%	-2.0%

Increase in Premium due to Lower Rates*					
	Scenario 1B	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Plan 1	0.0%	0.0%	4.3%	2.8%	0.0%
Plan 2	0.0%	0.0%	3.7%	2.5%	0.0%
MS Ext Basic	no projection	0.0%	5.9%	4.4%	0.0%
MS Basic	no projection	0.0%	7.4%	5.6%	0.0%
Premium Canceling Due to Rate Increases*					
	Scenario 1B	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Plan 1	-3.0%	-13.5%	-4.3%	0.0%	-6.0%
Plan 2	-3.0%	-13.2%	-5.2%	0.0%	-6.8%
MS Ext Basic	no projection	-14.2%	-2.9%	0.0%	-4.4%
MS Basic	no projection	-15.2%	-1.3%	0.0%	-2.0%

\* New business is at new sliding scale rates. Cancellations are at current rates.



## Exhibit C.1A

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 1A Part 1 Current

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$3,000
II	175-274%	0%	3,000
III	275-399%	0%	3,000
IV	400%+	0%	3,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,448	15.8%	\$1,133	7.3%	20.4%	\$13,778	\$2,243	16.3%	\$1,044	7.6%
175-274%	30.3%	25,770	2,397	9.3%	1,112	4.3%	24.1%	24,989	2,390	9.6%	1,120	4.5%
275-399%	16.3%	36,717	2,420	6.6%	1,045	2.8%	20.5%	37,681	2,347	6.2%	909	2.4%
400%+	32.3%	67,850	2,407	3.5%	1,066	1.6%	35.0%	68,841	2,495	3.6%	1,132	1.6%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$3,348	25.3%
175-274%	32.2%	20,607	3,348	16.2%
275-399%	16.2%	31,644	3,348	10.6%
400%+	18.4%	63,245	3,348	5.3%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,236	9.0%
175-274%	36.9%	21,214	1,236	5.8%
275-399%	13.0%	32,899	1,236	3.8%
400%+	7.4%	65,319	1,236	1.9%



## Exhibit C.1A

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 1A Part 2 Current

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$3,000
II	175-274%	0%	3,000
III	275-399%	0%	3,000
IV	400%+	0%	3,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	53.9%	84.4%	35.3%
8.0%-9.99%	8.5%	4.9%	11.3%
10.0%-11.99%	16.7%	5.2%	8.7%
12.0%-13.99%	0.4%	1.1%	8.9%
14.0%-15.99%	2.3%	0.8%	6.3%
16.0%-17.99%	4.2%	0.6%	4.2%
18.0%-19.99%	7.8%	1.0%	3.0%
20+%	6.2%	1.9%	22.3%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	54.7%	85.4%	40.4%
8.0%-9.99%	9.6%	5.4%	9.3%
10.0%-11.99%	9.1%	2.6%	9.4%
12.0%-13.99%	8.1%	1.0%	6.2%
14.0%-15.99%	5.6%	1.0%	5.2%
16.0%-17.99%	3.0%	0.9%	4.1%
18.0%-19.99%	0.3%	2.0%	5.6%
20+%	9.7%	1.9%	20.0%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	15.7%
8.0%-9.99%	11.1%
10.0%-11.99%	0.0%
12.0%-13.99%	23.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	50.3%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	82.3%
8.0%-9.99%	0.0%
10.0%-11.99%	17.7%
12.0%-13.99%	0.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%



## Exhibit C.1B

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 1B Part 1

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$5,000
II	175-274%	0%	5,000
III	275-399%	0%	5,000
IV	400%+	0%	5,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,369	15.3%	\$1,330	8.6%	20.4%	\$13,778	\$2,191	15.9%	\$1,186	8.6%
175-274%	30.3%	25,770	2,320	9.0%	1,239	4.8%	24.1%	24,989	2,335	9.3%	1,347	5.4%
275-399%	16.3%	36,717	2,343	6.4%	1,127	3.1%	20.5%	37,681	2,292	6.1%	1,008	2.7%
400%+	32.3%	67,850	2,330	3.4%	1,204	1.8%	35.0%	68,841	2,437	3.5%	1,371	2.0%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$3,348	25.3%
175-274%	32.2%	20,607	3,348	16.2%
275-399%	16.2%	31,644	3,348	10.6%
400%+	18.4%	63,245	3,348	5.3%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,236	9.0%
175-274%	36.9%	21,214	1,236	5.8%
275-399%	13.0%	32,899	1,236	3.8%
400%+	7.4%	65,319	1,236	1.9%



## Exhibit C.1B

### MCHA Premium Subsidy and Benefit Modification Study Scenario 1B Part 2

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$5,000
II	175-274%	0%	5,000
III	275-399%	0%	5,000
IV	400%+	0%	5,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	53.9%	83.2%	35.1%
8.0%-9.99%	8.5%	3.9%	11.0%
10.0%-11.99%	16.7%	4.7%	8.1%
12.0%-13.99%	0.4%	2.4%	8.6%
14.0%-15.99%	2.3%	0.8%	5.9%
16.0%-17.99%	4.2%	0.6%	4.6%
18.0%-19.99%	7.8%	1.5%	3.0%
20+%	6.2%	2.9%	23.7%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	54.7%	82.8%	39.8%
8.0%-9.99%	9.6%	5.5%	8.2%
10.0%-11.99%	9.1%	2.3%	8.5%
12.0%-13.99%	8.1%	2.0%	6.5%
14.0%-15.99%	5.6%	1.0%	6.5%
16.0%-17.99%	3.0%	0.9%	4.6%
18.0%-19.99%	0.3%	2.2%	4.9%
20+%	9.7%	3.5%	21.0%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	15.7%
8.0%-9.99%	11.1%
10.0%-11.99%	0.0%
12.0%-13.99%	23.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	50.3%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	82.3%
8.0%-9.99%	0.0%
10.0%-11.99%	17.7%
12.0%-13.99%	0.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%



## Exhibit C.2

### MCHA Premium Subsidy and Benefit Modification Study

#### Scenario 2 Part 1

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	20%	\$3,000
II	175-274%	20%	3,000
III	275-399%	20%	3,000
IV	400%+	20%	3,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,937	18.9%	\$1,133	7.3%	20.4%	\$13,778	\$2,692	19.5%	\$1,044	7.6%
175-274%	30.3%	25,770	2,876	11.2%	1,112	4.3%	24.1%	24,989	2,868	11.5%	1,120	4.5%
275-399%	16.3%	36,717	2,904	7.9%	1,045	2.8%	20.5%	37,681	2,816	7.5%	909	2.4%
400%+	32.3%	67,850	2,889	4.3%	1,066	1.6%	35.0%	68,841	2,994	4.3%	1,132	1.6%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$4,018	30.3%
175-274%	32.2%	20,607	4,018	19.5%
275-399%	16.2%	31,644	4,018	12.7%
400%+	18.4%	63,245	4,018	6.4%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,483	10.9%
175-274%	36.9%	21,214	1,483	7.0%
275-399%	13.0%	32,899	1,483	4.5%
400%+	7.4%	65,319	1,483	2.3%



## Exhibit C.2

### MCHA Premium Subsidy and Benefit Modification Study

#### Scenario 2 Part 2

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	20%	\$3,000
II	175-274%	20%	3,000
III	275-399%	20%	3,000
IV	400%+	20%	3,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	45.9%	84.4%	30.1%
8.0%-9.99%	8.4%	4.9%	9.6%
10.0%-11.99%	8.1%	5.2%	9.1%
12.0%-13.99%	8.4%	1.1%	7.5%
14.0%-15.99%	8.7%	0.8%	7.7%
16.0%-17.99%	2.3%	0.6%	5.6%
18.0%-19.99%	0.0%	1.0%	4.7%
20+%	18.2%	1.9%	25.7%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	46.5%	85.4%	34.9%
8.0%-9.99%	13.2%	5.4%	8.5%
10.0%-11.99%	4.6%	2.6%	8.7%
12.0%-13.99%	8.2%	1.0%	8.0%
14.0%-15.99%	7.2%	1.0%	5.1%
16.0%-17.99%	6.9%	0.9%	4.8%
18.0%-19.99%	0.4%	2.0%	3.5%
20+%	13.0%	1.9%	26.8%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	9.2%
8.0%-9.99%	6.5%
10.0%-11.99%	11.1%
12.0%-13.99%	0.0%
14.0%-15.99%	23.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	50.3%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	39.5%
8.0%-9.99%	42.8%
10.0%-11.99%	0.0%
12.0%-13.99%	0.0%
14.0%-15.99%	17.7%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%



## Exhibit C.3

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 3 Part 1

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	-12%	\$3,000
II	175-274%	-4%	3,000
III	275-399%	8%	3,000
IV	400%+	20%	3,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,154	13.9%	\$1,133	7.3%	20.4%	\$13,778	\$1,974	14.3%	\$1,044	7.6%
175-274%	30.3%	25,770	2,301	8.9%	1,112	4.3%	24.1%	24,989	2,295	9.2%	1,120	4.5%
275-399%	16.3%	36,717	2,614	7.1%	1,045	2.8%	20.5%	37,681	2,534	6.7%	909	2.4%
400%+	32.3%	67,850	2,889	4.3%	1,066	1.6%	35.0%	68,841	2,994	4.3%	1,132	1.6%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$2,946	22.3%
175-274%	32.2%	20,607	3,214	15.6%
275-399%	16.2%	31,644	3,616	11.4%
400%+	18.4%	63,245	4,018	6.4%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,088	8.0%
175-274%	36.9%	21,214	1,186	5.6%
275-399%	13.0%	32,899	1,335	4.1%
400%+	7.4%	65,319	1,483	2.3%



## Exhibit C.3

### MCHA Premium Subsidy and Benefit Modification Study

#### Scenario 3 Part 2

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	-12%	\$3,000
II	175-274%	-4%	3,000
III	275-399%	8%	3,000
IV	400%+	20%	3,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	50.8%	84.4%	32.5%
8.0%-9.99%	12.7%	4.9%	12.0%
10.0%-11.99%	14.3%	5.2%	11.6%
12.0%-13.99%	4.1%	1.1%	7.2%
14.0%-15.99%	2.3%	0.8%	7.5%
16.0%-17.99%	7.2%	0.6%	6.1%
18.0%-19.99%	3.4%	1.0%	4.4%
20+%	5.3%	1.9%	18.6%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	54.7%	85.4%	36.5%
8.0%-9.99%	12.7%	5.4%	10.3%
10.0%-11.99%	9.6%	2.6%	10.3%
12.0%-13.99%	8.8%	1.0%	9.1%
14.0%-15.99%	3.9%	1.0%	5.4%
16.0%-17.99%	2.0%	0.9%	5.5%
18.0%-19.99%	1.4%	2.0%	5.8%
20+%	6.9%	1.9%	17.4%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	9.2%
8.0%-9.99%	14.9%
10.0%-11.99%	3.0%
12.0%-13.99%	22.7%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	16.5%
20+%	33.8%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	82.3%
8.0%-9.99%	0.0%
10.0%-11.99%	17.7%
12.0%-13.99%	0.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%



## Exhibit C.4

### MCHA Premium Subsidy and Benefit Modification Study

#### Scenario 4 Part 1

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	-12%	\$3,000
II	175-274%	0%	3,000
III	275-399%	0%	3,000
IV	400%+	0%	3,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,154	13.9%	\$1,133	7.3%	20.4%	\$13,778	\$1,974	14.3%	\$1,044	7.6%
175-274%	30.3%	25,770	2,397	9.3%	1,112	4.3%	24.1%	24,989	2,390	9.6%	1,120	4.5%
275-399%	16.3%	36,717	2,420	6.6%	1,045	2.8%	20.5%	37,681	2,347	6.2%	909	2.4%
400%+	32.3%	67,850	2,407	3.5%	1,066	1.6%	35.0%	68,841	2,495	3.6%	1,132	1.6%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$2,946	22.3%
175-274%	32.2%	20,607	3,348	16.2%
275-399%	16.2%	31,644	3,348	10.6%
400%+	18.4%	63,245	3,348	5.3%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,088	8.0%
175-274%	36.9%	21,214	1,236	5.8%
275-399%	13.0%	32,899	1,236	3.8%
400%+	7.4%	65,319	1,236	1.9%



## Exhibit C.4

### MCHA Premium Subsidy and Benefit Modification Study Scenario 4 Part 2

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	-12%	\$3,000
II	175-274%	0%	3,000
III	275-399%	0%	3,000
IV	400%+	0%	3,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	54.3%	84.4%	35.7%
8.0%-9.99%	10.0%	4.9%	11.1%
10.0%-11.99%	15.1%	5.2%	8.9%
12.0%-13.99%	1.4%	1.1%	8.7%
14.0%-15.99%	3.3%	0.8%	6.6%
16.0%-17.99%	7.2%	0.6%	5.6%
18.0%-19.99%	3.4%	1.0%	3.5%
20+%	5.3%	1.9%	19.9%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	56.3%	85.4%	40.5%
8.0%-9.99%	9.0%	5.4%	9.3%
10.0%-11.99%	11.9%	2.6%	9.6%
12.0%-13.99%	5.8%	1.0%	6.8%
14.0%-15.99%	6.8%	1.0%	4.8%
16.0%-17.99%	2.0%	0.9%	5.8%
18.0%-19.99%	1.4%	2.0%	6.4%
20+%	6.9%	1.9%	17.1%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	15.7%
8.0%-9.99%	11.1%
10.0%-11.99%	0.3%
12.0%-13.99%	22.7%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	16.5%
20+%	33.8%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	82.3%
8.0%-9.99%	0.0%
10.0%-11.99%	17.7%
12.0%-13.99%	0.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%



## Exhibit C.5

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 5 Part 1

Category	Income as % of Federal Poverty Level	Proposed Premium Discount/Incr.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$3,000
II	175-274%	0%	3,000
III	275-399%	20%	3,000
IV	400%+	20%	3,000

Income as % of Federal Poverty Level	Plan 1						Plan 2					
	Member Distribution	Average Income	Annual Premium	% of Income	Non-covered OOP Expense	% Income	Member Distribution	Average Income	Premium	% of Income	Non-covered OOP Expense	% Income
0-174%	21.1%	\$15,512	\$2,448	15.8%	\$1,133	7.3%	20.4%	\$13,778	\$2,243	16.3%	\$1,044	7.6%
175-274%	30.3%	25,770	2,397	9.3%	1,112	4.3%	24.1%	24,989	2,390	9.6%	1,120	4.5%
275-399%	16.3%	36,717	2,904	7.9%	1,045	2.8%	20.5%	37,681	2,816	7.5%	909	2.4%
400%+	32.3%	67,850	2,889	4.3%	1,066	1.6%	35.0%	68,841	2,994	4.3%	1,132	1.6%

Income as % of Federal Poverty Level	MS Extended			
	Member Distribution	Average Income	Annual Premium	% of Income
0-174%	33.2%	\$13,241	\$3,348	25.3%
175-274%	32.2%	20,607	3,348	16.2%
275-399%	16.2%	31,644	4,018	12.7%
400%+	18.4%	63,245	4,018	6.4%

Income as % of Federal Poverty Level	MS Basic			
	Member Distribution	Average Income	Premium	% of Income
0-174%	42.8%	\$13,665	\$1,236	9.0%
175-274%	36.9%	21,214	1,236	5.8%
275-399%	13.0%	32,899	1,483	4.5%
400%+	7.4%	65,319	1,483	2.3%



## Exhibit C.5

### MCHA Premium Subsidy and Benefit Modification Study

Scenario 5 Part 2

Category	Income as % of Federal Poverty Level	Proposed Prem Disc.	Proposed Out-of-Pocket Limit
I	0-174%	0%	\$3,000
II	175-274%	0%	3,000
III	275-399%	20%	3,000
IV	400%+	20%	3,000

Plan 1			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	49.6%	84.4%	31.3%
8.0%-9.99%	8.4%	4.9%	10.5%
10.0%-11.99%	18.9%	5.2%	10.5%
12.0%-13.99%	1.0%	1.1%	9.4%
14.0%-15.99%	3.9%	0.8%	7.5%
16.0%-17.99%	4.2%	0.6%	5.3%
18.0%-19.99%	7.8%	1.0%	2.8%
20+%	6.2%	1.9%	22.8%

Plan 2			
% of Income	% of Sample with Expenses in Range		
	Premium	Out-of-pocket Medical Exp. Only	Premium + Out-of-pocket
0.0-8.0%	47.8%	85.4%	35.9%
8.0%-9.99%	14.9%	5.4%	9.0%
10.0%-11.99%	7.1%	2.6%	9.3%
12.0%-13.99%	10.7%	1.0%	9.6%
14.0%-15.99%	5.6%	1.0%	5.5%
16.0%-17.99%	4.1%	0.9%	4.5%
18.0%-19.99%	0.3%	2.0%	5.4%
20+%	9.7%	1.9%	21.1%

Extended Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	9.2%
8.0%-9.99%	6.5%
10.0%-11.99%	11.1%
12.0%-13.99%	15.1%
14.0%-15.99%	7.8%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	50.3%

Basic MS	
% of Income	% of Sample
	Premium
0.0-8.0%	82.3%
8.0%-9.99%	0.0%
10.0%-11.99%	17.7%
12.0%-13.99%	0.0%
14.0%-15.99%	0.0%
16.0%-17.99%	0.0%
18.0%-19.99%	0.0%
20+%	0.0%

