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### Publication Date

2003



## *Profile of California's HMO Enrollees:* Findings from the 2001 California Health Interview Survey



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**January 2003**



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This UCLA Center for Health Policy Research report was funded by  
the California Office of the Patient Advocate.

The views expressed in this report are those of the authors and do not necessarily represent the  
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**Citation:** GF Kominski, PL Davidson, CL Keeler, N Razack, LM Becerra, R Sen.  
*Profile of California's HMO Enrollees: Findings from the 2001 California Health Interview Survey.*  
A Report for the California Office of the Patient Advocate.  
Los Angeles: UCLA Center for Health Policy Research, 2003.

The UCLA Center for Health Policy Research is affiliated with the  
UCLA School of Public Health and the School of Public Policy and Social Research.



*california  
health  
interview  
survey*

This report is based on data from the 2001 California  
Health Interview Survey. CHIS is a collaboration of the  
UCLA Center for Health Policy Research, the California  
Department of Health Services, and the Public Health

Institute and is the largest statewide health survey conducted in the U.S. For more  
information on CHIS and access to CHIS 2001 data and results, visit [www.chis.ucla.edu](http://www.chis.ucla.edu).

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## *Acknowledgments*

The authors are grateful to a number of people who participated in the production of this report. Roberta Wyn, Nadereh Pourat, and Hongjian Yu provided a thorough review of the draft report. Dora Ding provided valuable statistical assistance; Marianne Cantwell assisted with table construction and fact checking; and Paula Y. Bagasao and Clodagh Harvey provided editorial, publication, and communication services. Ninez Ponce, Neetu Chawla, and Erin Wilson were consulted on several topical areas of the report. Thanks to Carolyn Mendez for creating the maps of California's geographic regions. Many thanks also go to Ikkanda Design Group for designing the report. We are also grateful for the support of the Office of the Patient Advocate with its commitment to enhancing managed care in the State of California. We are particularly grateful to Ed Mendoza and Cori Reifman for their leadership.



# executive summary

## Executive Summary

This report, produced by the UCLA Center for Health Policy Research under contract to the California Office of the Patient Advocate, provides a detailed demographic profile of California's HMO enrollee population using data from the 2001 California Health Interview Survey (CHIS 2001). CHIS 2001, a new source of health information for California, is the largest state health survey ever conducted in the United States. This report uses CHIS 2001 data to develop a more refined population-based profile of California's HMO population than has been available to date.

The Office of the Patient Advocate (OPA) is charged with informing HMO members about their rights and responsibilities, including the benefits of early interventions and preventive care. The OPA's goal in providing information to HMO members is to assist them in acquiring the highest quality care and services. We anticipate that the information in this report will be useful in designing and implementing targeted, language-appropriate community education and awareness campaigns to educate consumers on the roles and functions of the OPA, the OPA's HMO Help Center, and the Department of Managed Health Care. We also expect that HMOs will find the information contained here particularly useful in understanding the diversity of their membership and the regions they serve.

### SUMMARY OF MAJOR FINDINGS

#### *Language, Education, and Race/Ethnicity*

- ▼ More than one-third (34%) of California's HMO population communicates at home in a language in addition to or other than English (e.g., Spanish or Chinese) and 4% do not speak English very well or at all. In Los Angeles and Santa Clara counties, nearly 50% of the population communicates at home in a language other than, or in addition to, English.
- ▼ Thirty-five percent of adult HMO enrollees ages 18-64 and 45% of HMO enrollees ages 65 and over have a high school education or less. For 18-64 year olds, the percentage of HMO enrollees with a high school education or less ranges from 20% in the San Francisco region to 46% in the Central rural region.
- ▼ Forty-one percent of the state's HMO members are nonwhite. Latinos account for 19% of total HMO enrollment, followed by Asian American and Pacific Islanders (12%), African Americans (7%), and Native American and other (3%).
- ▼ HMO enrollment by ethnicity varies considerably across geographic areas (i.e., counties and county groups) within the state.
  - White enrollment varies from 44% in Los Angeles County to 85% in the Northern rural region.
  - Latino enrollment ranges from 6% in the Northern rural region to 29% in Los Angeles County.
  - Asian-American and Pacific Islander enrollment ranges from 3% in Santa Cruz County to 28% in Santa Clara County.
  - African-American enrollment ranges from 2% in Orange County to 11% in the Oakland region.

#### *Medical Conditions and Health Status*

- ▼ The majority of HMO members ages 65 and over have hypertension, with rates of 52% for males and 55% for females.
- ▼ Five percent of HMO members ages 18-64 and 14% of HMO members ages 65 and over report having diabetes.
- ▼ Nineteen percent of adult HMO members and more than one-third (35%) ages 65 and over have physical limitations that impaired their performance at work or other activities in the past four weeks.

- ▼ For HMO enrollees, asthma rates range from 15% for children ages 0-17, 12% for adults ages 18-64, and 10% for persons 65 or over. For HMO enrollees ages 0-17, asthma rates range from 12% in Orange and Santa Cruz counties to 20% in Napa and Solano counties.

#### *Risk Factors*

- ▼ Young adults in HMOs have high rates of heavy or binge drinking (at least 5 drinks on one or more occasion in the last month). Among those ages 18-20, 29% of males and 15% of females reported binge drinking, while the rates for those ages 21-25 is 37% for males and 19% for females. For male adults ages 26-64, the rate is 23% among HMO enrollees.

#### *Access and Utilization*

- ▼ Thirteen percent of HMO members statewide reported delaying or not receiving needed medical care, ranging from 11% in Riverside, San Bernardino, and Orange counties to 23% in Santa Cruz County.
- ▼ Eighty percent of all female HMO members ages 40 and over have had mammograms within the past two years, consistent with the recommendation of the U.S. Preventive Services Task Force. There is little geographic variation among California's HMO enrollees in mammography rates.
- ▼ Twenty-two percent of the female HMO members ages 18-64 have not had a pap smear in over one year, ranging from 20% in the San Francisco region to 28% in the Northern rural area and Sonoma County. For women ages 65 and over, 43% have not had a pap smear in over one year, ranging from 40% in Orange County to 55% in Napa and Solano counties.

- ▼ Fifty-one percent of HMO members with young children received doctor/clinic reminders for immunizations, ranging from 44% in Ventura County to 61% in Sonoma County.

#### GENERAL POLICY RECOMMENDATION

The ethnic, racial, educational, linguistic, and cultural diversity of California's HMO population documented in this report suggest the following recommendation regarding HMO efforts to communicate in the most effective manner with their members.

***HMO outreach and communication materials should recognize the diversity in ethnicity, English fluency, and educational attainment of California's HMO enrollees.***

The ethnic diversity and variations in language fluency of California's HMO population indicate potential barriers to HMO members in understanding HMO policies and programs. Thus, when preparing materials for distribution and outreach, HMOs should provide information in different languages and adapted for cultural variations in the member populations. Because the educational attainment of HMO enrollees varies within the state, the OPA has an opportunity to set standards governing development of written materials by HMOs so that policies and benefits are clearly communicated to all HMO enrollees, particularly those with a high school education or less. The OPA and HMOs should also recognize the diversity of California's HMO membership in their efforts to educate members regarding their benefits, rights, and health needs.

## 1. State-level Data for HMO Enrollees, Non-HMO Insured, and Uninsured Californians

This section profiles California's HMO population using state-level data. Characteristics of HMO enrollees are compared with individuals having non-HMO health insurance and those with no insurance. These comparison groups are of interest for several reasons. Studies over the past decade have focused on how HMO enrollees compare with those in fee-for-service and other forms of health insurance, including less restrictive forms of managed care. Such comparisons show how similar HMO enrollees are to the rest of the insured population. Information on how the uninsured compare with HMO enrollees is also relevant because of ongoing interest among policy makers in expanding public managed-care programs to cover increasing numbers of the uninsured.

According to CHIS 2001, 53.7% of California's population was enrolled in HMOs, or about 17.7 million children and adults in approximately 5.5 million households.<sup>1</sup> Another 29.2% are insured in non-HMO plans, 3.4% are insured but their HMO enrollment status could not be determined, and 13.7% were uninsured at the time of the survey.

Section 1 presents characteristics of both the insured and uninsured populations according to four major categories of interest: (1) sociodemographic characteristics; (2) medical conditions and health status; (3) self-reported risk factors (e.g., alcohol and tobacco use); and (4) access and utilization of medical care, including Health Plan Employer Data and Information Set (HEDIS) measures commonly reported by health plans as quality indicators (e.g., screening and immunization rates).

<sup>1</sup> According to Cattaneo and Stroud, a private consulting firm that collects data on HMO enrollment in California, about 18.3 million Californians were enrolled in HMOs in 2001. Our figure is slightly lower due to the 3.4% of survey respondents whose HMO status was undetermined.

### 1.1 SOCIODEMOGRAPHIC CHARACTERISTICS

This section describes the characteristics of HMO enrollees as well as non-HMO enrollees and the uninsured population in terms of citizenship status, years in the United States, language, education level, employment status, gender, age, race, and marital status. Exhibit 1 presents the findings, which are discussed below.

#### *Citizenship Status and Language*

Nearly three-quarters (73%) of HMO enrollees are U.S.-born citizens. An additional 15% are naturalized citizens and 12% are noncitizens. Among the uninsured, 43% are U.S.-born citizens, 13% are naturalized citizens, and 44% are noncitizens. Among HMO enrollees, 12% were not born in the U.S. but have been in this country for 20 or more years, and approximately 3% are new immigrants (in the U.S. less than five years).

Because many people in California have migrated from other countries, language is an important concern for health-care providers in the state. About one-third of California's HMO population (34%) communicates at home in a language in addition to English or solely in another language (24% are bilingual and 10% speak solely another language). A total of 4% of HMO enrollees report that they do not speak English well or at all. The uninsured are even more likely to report they speak another language at home in addition to or instead of English (66%), and a total of 29% report that they do not speak English well or at all.

Among HMO enrollees, 15% are naturalized citizens and 12% are noncitizens....3% are new immigrants who have been in the U.S. for less than 5 years.

**EXHIBIT 1. SOCIODEMOGRAPHIC CHARACTERISTICS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001**

	<b>HMO PERCENT</b>	<b>NON-HMO PERCENT</b>	<b>UNINSURED PERCENT</b>
<b>CITIZENSHIP STATUS</b>			
U.S.-BORN CITIZEN	73	75	43
NATURALIZED CITIZEN	15	13	13
NONCITIZEN WITH GREEN CARD	8	7	19
NONCITIZEN WITHOUT GREEN CARD	4	5	25
<b>YEARS IN UNITED STATES (EXCLUDING THOSE BORN IN THE U.S.)</b>			
0-4	3	4	14
5-9	3	3	9
10-14	5	5	15
15-19	4	3	7
20+	12	11	13
<b>LANGUAGE SPOKEN AT HOME</b>			
ENGLISH	66	68	34
SPANISH	4	5	24
CHINESE	1	1	1
OTHER ASIAN*	1	1	2
ENGLISH AND SPANISH	15	13	29
ENGLISH AND OTHER**	9	9	7
OTHER***	4	3	3
<b>ENGLISH PROFICIENCY</b>			
SPEAK ENGLISH ONLY	66	68	34
BILINGUAL OR NON-ENGLISH ONLY			
SPEAK ENGLISH VERY WELL/WELL	30	26	37
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	6	29
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>			
AGES 18-64	35	36	65
AGES 65 AND OVER	45	45	56
<b>CURRENTLY EMPLOYED</b>			
AGES 18-64	75	70	63

\* "Other Asian" includes Vietnamese, Korean, and other Asian languages.  
 \*\* "English and Other" includes English in conjunction with Chinese, European, Asian, or Other as a second language.  
 \*\*\* "Other" includes other single language, and two or more other languages.

continued on next page

**EXHIBIT 1. SOCIODEMOGRAPHIC CHARACTERISTICS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001 (CONTINUED)**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>GENDER</b>			
FEMALE	53	51	7
<b>AGE</b>			
AGES 0-17	31	26	20
AGES 18-64	59	58	80
AGES 65 AND OVER	10	16	<1
<b>RACE/ETHNICITY</b>			
ASIAN AMERICAN AND PACIFIC ISLANDER	12	10	11
AFRICAN AMERICAN	7	6	4
LATINO	19	17	51
WHITE	59	64	30
OTHER	3	3	4
<b>MARRIED</b>			
AGES 18-64	61	57	41
AGES 65 AND OVER	57	55	35
<b>ANNUAL FAMILY INCOME</b>			
\$0-\$10,000	5	8	15
\$10,001-20,000	12	14	33
\$20,001-30,000	11	11	19
\$30,001-40,000	12	11	11
\$40,001-50,000	10	9	6
\$50,001-60,000	8	7	4
\$60,001-\$70,000	8	6	3
\$70,001-\$80,000	7	6	3
\$80,000+	27	28	6
<b>ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS</b>			
<100%	9	12	31
100%-199%	17	17	34
200%-299%	15	14	14
300%+	59	57	21
<b>HEALTH INSURANCE COVERAGE</b>			
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	17	18	-
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	17	20	-

### *Education*

Slightly over one-third (35%) of the HMO population ages 18-64 has a high school education or less. A greater proportion (45%) of HMO enrollees ages 65 and over have not completed education beyond high school. Among the uninsured, 65% those ages 18-64 and 56% of those ages 65 and over have a high school education or less.

### *Race/Ethnicity*

California's population is extremely diverse. Among the HMO enrollees, 59% are white, 19% are Latino, 12% are Asian American and Pacific Islander, 7% are African American, and 3% comprise several smaller racial groups including American Indian and Alaska Native (AIAN). The uninsured in California are disproportionately (51%) Latino, consistent with the findings of other studies.<sup>2</sup>

### *Marital Status*

Sixty-one percent of adult HMO enrollees ages 18-64 and 57% ages 65 and over are married.

Slightly over one-third (35%) of the HMO population ages 18-64 has a high school education or less.

### *Income and Insurance*

The median family income in California is about \$45,000. The annual family income for the HMO subgroup is fairly evenly distributed among income categories, with 27% reporting income greater than \$80,000 in 2001. About 17% of HMO households reported \$20,000 or less annual income compared with 48% among the uninsured. Non-HMO insured individuals have an income distribution very similar to HMO enrollees, indicating that high-income individuals are not concentrated in non-HMO plans.

Nine percent of HMO enrollees have family incomes less than 100% of the federal poverty level (FPL), while another 17% have family incomes 100-199% of the FPL. In contrast, 65% of the uninsured reported family incomes less than 200% of the FPL. Overall, 17% of HMO enrollees ages 0-64 are in Medi-Cal or other government programs.

2 Brown ER, Ponce N, Rice T, Lavarreda SA. *The State of Health Insurance in California: Findings from the 2001 California Health Interview Survey*. Los Angeles, CA: UCLA Center for Health Policy Research, 2002.

## 1.2 MEDICAL CONDITIONS AND HEALTH STATUS

This section describes the medical conditions and self-reported health status of HMO members in California along with the non-HMO insured and the uninsured. The results are summarized in Exhibit 2.

### *Heart Disease*

Among HMO enrollees ages 65 and over, 27% of males and 19% of females were informed by a medical professional that they had heart disease. Among male HMO enrollees, 6% of those 35-64 years of age had heart disease, while 7% of women ages 45-64 had heart disease.<sup>3</sup>

Among HMO enrollees, 62% of those with heart disease were taking medication; 64% of those with non-HMO coverage were taking medication. In contrast, among the uninsured with heart disease, 29% were taking medication to control heart disease.

### *Hypertension*

Among women HMO enrollees ages 45-64, 30% were told by a medical professional that they had hypertension. Approximately one-fourth of male HMO enrollees ages 35-64 (26%) had hypertension. Not surprisingly, a higher percentage of HMO enrollees ages 65 and over have hypertension: 52% of males and 55% of females.

### *Cholesterol*

High blood cholesterol is an important risk factor for coronary heart disease (CHD). The U.S. Preventive Services Task Force recommends routine cholesterol screenings for men ages 35 and over and for women ages 45 and over.<sup>4</sup> Adults with coronary heart disease risk factors should begin cholesterol screening at age 20.

Among HMO enrollees ages 65 and over, 98% of men and 98% of women have received cholesterol screenings within the past five years. Men ages 35-64 (95%) and women ages 45-64 (97%) are also within recommended guidelines.

Among adult HMO enrollees, 38% of men ages 35-64 and 35% of women ages 45-64 have high blood cholesterol. Among HMO enrollees ages 65 and over, 26% of men and 34% of women have high blood cholesterol.

### *Diabetes*

Among adult HMO members ages 18-64, 5% have diabetes. Fourteen percent of HMO members ages 65 and over have diabetes.

### *Asthma*

Fifteen percent of children ages 0-17, 12% of adults ages 18-64, and 10% of older Californians ages 65 and over enrolled in HMOs have asthma.

### *Physical Limitations and Health Status*

Among HMO enrollees 18-64 years old, 19% reported they faced a physical limitation in the past four weeks that limited the kind of work and other activities they were able to do. Among HMO members 65 years and over, 35% reported physical limitations.

Among HMO enrollees, 8% of children 0-17 years old, 14% of adults 18-64 years old, and 28% of those 65 years and over reported being in fair or poor health. Among the uninsured, 18% of children and 26% of adults 18-64 years old reported being in fair or poor health.

3 Heart disease has a delayed onset in women, accounting for the different age intervals reported here.

4 U.S. Preventive Services Task Force. Screening: Lipid Disorders in Adults. See <http://www.ahcpr.gov/clinic/uspstf/uspstf.html>.

**EXHIBIT 2. MEDICAL CONDITIONS AND HEALTH STATUS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001**

	<b>HMO PERCENT</b>	<b>NON-HMO PERCENT</b>	<b>UNINSURED PERCENT</b>
<b>HEART DISEASE</b>			
TOLD HAVE HEART DISEASE			
MEN AGES 18-34	1	3	1
MEN AGES 35-64	6	7	4
MEN AGES 65 AND OVER	27	31	–
WOMEN AGES 18-44	2	1	1
WOMEN AGES 45-64	7	9	8
WOMEN AGES 65 AND OVER	19	23	–
TAKING MEDICATION TO CONTROL HEART DISEASE (PEOPLE WITH HEART DISEASE, AGES 18 AND OVER)	62	64	29
<b>HYPERTENSION</b>			
TOLD HAVE HIGH BLOOD PRESSURE*			
MEN AGES 18-34	8	8	7
MEN AGES 35-64	26	25	20
MEN AGES 65 AND OVER	52	51	–
WOMEN AGES 18-44	10	7	7
WOMEN AGES 45-64	30	27	28
WOMEN AGES 65 AND OVER	55	55	–
<b>CHOLESTEROL</b>			
TOLD HAVE HIGH BLOOD CHOLESTEROL*			
MEN AGES 18-34	35	24	31
MEN AGES 35-64	38	38	37
MEN AGES 65 AND OVER	26	21	–
WOMEN AGES 18-44	24	19	23
WOMEN AGES 45-64	35	38	47
WOMEN AGES 65 AND OVER	34	30	–
HAVE HIGH BLOOD CHOLESTEROL CHECK WITHIN LAST FIVE YEARS			
MEN AGES 20-34	83	73	74
MEN AGES 35-64	95	94	78
MEN AGES 65 AND OVER	98	96	–
WOMEN AGES 20-44	90	88	78
WOMEN AGES 45-64	97	95	88
WOMEN AGES 65 AND OVER	98	97	–

\* Regular screenings for hypertension and cholesterol should start around age 35 for men and age 45 for women, although certain high-risk groups should begin screening earlier.

continued on next page



**EXHIBIT 2. MEDICAL CONDITIONS AND HEALTH STATUS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001 (CONTINUED)**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>DIABETES</b>			
TOLD HAVE DIABETES**			
AGES 18-64	5	4	3
AGES 65 AND OVER	14	14	–
<b>ASTHMA</b>			
TOLD HAVE ASTHMA			
AGES 0-17	15	13	9
AGES 18-64	12	13	8
AGES 65 AND OVER	10	11	–
<b>EXPERIENCED PHYSICAL LIMITATIONS (AGES 18 AND OVER)</b>			
ANY LIMITATION IN PAST 4 WEEKS			
AGES 18-64	19	18	17
AGES 65 AND OVER	35	36	–
<b>SELF-REPORTED HEALTH STATUS: EXCELLENT</b>			
AGES 0-17	40	40	23
AGES 18-64	22	23	15
AGES 65 AND OVER	12	13	–
<b>SELF-REPORTED HEALTH STATUS: FAIR/POOR</b>			
AGES 0-17	8	8	18
AGES 18-64	14	14	26
AGES 65 AND OVER	28	29	–

\*\* The diabetes question was asked of adolescents ages 12-17; however, the sample sizes were too small to report.

### 1.3 RISK FACTORS

Alcohol and tobacco use are two of the most significant risk factors affecting the health of California’s population. Findings for these risk factors are summarized in Exhibit 3.

#### *Alcohol Usage*

Underage drinking among HMO enrollees is fairly common, with 46% of males and 44% of females ages 18-20 reporting use of alcohol during the past month. Among HMO enrollees ages 18-20, 29% of males and 15% of females reported binge drinking during the past month. Binge drinking was also high among HMO enrollees ages 21-25: 37% among males and 19% among females.

**EXHIBIT 3. RISK FACTORS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>ALCOHOL USAGE</b>			
ANY DRINKS IN PAST MONTH			
MEN AGES 18-20	46	46	54
MEN AGES 21-25	73	73	70
MEN AGES 26-64	71	71	67
MEN AGES 65 AND OVER	60	59	–
WOMEN AGES 18-20	44	42	31
WOMEN AGES 21-25	63	65	47
WOMEN AGES 26-64	55	56	40
WOMEN AGES 65 AND OVER	43	45	–
5+ DRINKS IN PAST MONTH (1+ TIMES)*			
MEN AGES 18-20	29	27	27
MEN AGES 21-25	37	41	40
MEN AGES 26-64	23	23	31
MEN AGES 65 AND OVER	4	5	–
WOMEN AGES 18-20	15	14	10
WOMEN AGES 21-25	19	18	12
WOMEN AGES 26-64	7	9	7
WOMEN AGES 65 AND OVER	1	1	–

\* This question was only asked of adult respondents who reported at least 1 drink during the past month.

continued on next page

*Tobacco Usage*

The majority of California’s HMO population ages 18-64 — 54% of males and 65% of females — have not smoked more than 100 cigarettes in their lifetimes. When those who have quit smoking are added to this group, 81% of males and 83% of females enrolled in HMOs are currently not smoking. Nineteen percent of males and 17% of females reported being current smokers (defined as smoking every day or some days during the past month). Among adult HMO enrollees ages 18-64, 13% of males and 11% of females reported smoking every day. Among the uninsured ages 18-64, 21% of males and 12% of females reported smoking every day.

1.4 ACCESS AND UTILIZATION

Adequate access to health care, including preventive and screening services, is an important determinant of population health. Exhibit 4 presents several important measures of access and utilization of health care services among Californians.

Among HMO enrollees, 19% of males and 17% of females reported being current smokers.

**EXHIBIT 3. RISK FACTORS  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001 (CONTINUED)**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>TOBACCO USAGE</b>			
EVER SMOKED**			
MEN AGES 18-64	46	46	53
MEN AGES 65 AND OVER	71	65	–
WOMEN AGES 18-64	35	36	27
WOMEN AGES 65 AND OVER	42	43	–
SMOKES SOME DAYS***			
MEN AGES 18-64	6	6	11
MEN AGES 65 AND OVER	1	1	–
WOMEN AGES 18-64	5	5	4
WOMEN AGES 65 AND OVER	2	2	–
SMOKES EVERY DAY***			
MEN AGES 18-64	13	13	21
MEN AGES 65 AND OVER	6	6	–
WOMEN AGES 18-64	11	10	12
WOMEN AGES 65 AND OVER	6	7	–

\*\* Defined as at least 100 cigarettes in lifetime. This variable was not available for the age group 0-17.

\*\*\* This question was only asked of adult respondents who had smoked more than 100 cigarettes in their lifetimes.

*Utilization*

Nine percent of adult HMO enrollees have stayed overnight in a hospital, including hospital stays for newborn delivery. Twenty-five percent of HMO enrollees reported 5 or more visits to the doctor during the past 12 months, while 22% reported only one. Thirteen percent of HMO enrollees had not seen a doctor in the past 12 months.

Some adult HMO enrollees (13%) delayed or did not receive medical care, prescription drugs (10%), and tests or treatments (9%) they felt they needed. HMO

enrollees were much more likely (94%) than the uninsured (59%) to have a usual source of care.

*Perceived Discrimination*

Five percent of adult HMO enrollees ages 18 and over reported being discriminated against while trying to obtain health care. Among HMO respondents who perceived discrimination, 30% believed it was because of their insurance type; 15% believed it was because of their race/ethnicity.

**EXHIBIT 4. ACCESS AND UTILIZATION  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>HOSPITAL STAYS</b>			
STAYED OVERNIGHT/LAST 12 MONTHS	9	10	5
<b>TIMES A DOCTOR SEEN IN 12 MONTHS (AGES 18 AND OVER)</b>			
0 TIMES	13	14	40
1 TIME	22	21	24
2 TIMES	19	18	14
3 TIMES	12	12	6
4 TIMES	9	9	5
5+ TIMES	25	26	11
<b>DELAY IN NECESSARY MEDICAL CARE</b>			
DELAYED/DID NOT GET CARE	13	11	20
DELAYED/DID NOT GET PRESCRIPTION	10	8	8
DELAYED/DID NOT GET TEST OR TREATMENT	9	7	6
<b>USUAL SOURCE OF CARE</b>			
HAVE A USUAL SOURCE OF CARE	94	89	59
<b>PERCEIVED DISCRIMINATION</b>			
EVER EXPERIENCED?	5	3	8
PERCEIVED REASON			
AGE/WEIGHT/INCOME/RELIGION/SEXUAL-ORIENTATION/OTHER	37	43	39
RACE/ETHNIC GROUP	15	17	22
LANGUAGE/ACCENT	6	4	12
HEALTH OR DISABILITY	7	8	6
INSURANCE (E.G., MEDI-CAL)	30	25	20
GENDER/SEX	5	3	1

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*Breast Cancer Screening*

A large percentage of women ages 40 and over (92%) enrolled in HMOs have received at least one mammogram in their lifetimes. Sixty-four percent received a mammogram within the past year, while

another 16% had a mammogram within the past two years. The U.S. Preventive Services Task Force recommends mammograms every one to two years for women ages 40 and older.<sup>5</sup>

<sup>5</sup> U.S. Preventive Services Task Force. Screening for Breast Cancer: Recommendations and Rationale. See <http://www.ahcpr.gov/clinic/3rduspstf/breastcancer/brcanrr.htm>.

**EXHIBIT 4. ACCESS AND UTILIZATION  
PROFILE OF HMO ENROLLEES, NON-HMO INSURED, AND UNINSURED CALIFORNIANS, CHIS 2001 (CONTINUED)**

	HMO PERCENT	NON-HMO PERCENT	UNINSURED PERCENT
<b>BREAST CANCER SCREENING (WOMEN AGES 40 AND OVER)</b>			
HAD MAMMOGRAM	92	91	72
MOST RECENT MAMMOGRAM			
1 YEAR OR LESS	64	64	35
1-2 YEARS	16	14	13
2+ YEARS	12	13	24
ABNORMAL MAMMOGRAM RESULTS	22	22	17
<b>CERVICAL CANCER SCREENING (WOMEN AGES 18 AND OVER)</b>			
EVER HAD PAP SMEAR TEST	95	95	86
MOST RECENT PAP SMEAR TEST 1+ YEARS			
WOMEN AGES 18-64	22	22	27
WOMEN AGES 65 AND OVER	43	45	–
ABNORMAL PAP SMEAR TEST	25	22	18
PORTION WHO RECEIVED MORE TESTS OR TREATMENTS AFTER ABNORMAL PAP RESULT	91	91	82
<b>CHILDHOOD IMMUNIZATIONS</b>			
OBTAINED DOCTOR/CLINIC REMINDERS	51	50	49
HAVE HAD DIFFICULTY GETTING SHOTS	2	2	4

\* Adolescents (12-17) were not asked about time since last doctor visit.

*Cervical Cancer Screening*

Most females 18 years and over (95%) enrolled in HMOs have had at least one screening for cervical cancer (i.e., a pap smear) in their lifetimes. However, among HMO enrollees, 22% of women 18-64 years of age and 43% of those ages 65 and over had not had a pap smear within the past year. According to recommendations of the American College of Preventive Medicine, women older than 18 and all females who are sexually active (including those

younger than 18) should have pap smears annually until they have at least three consecutive normal results, and thereafter, pap smears at least every three years.<sup>6</sup>

*Childhood Immunizations*

About half (51%) the parents of children enrolled in HMOs received doctor or clinic reminders for their children's immunizations. Only 2% reported having difficulty obtaining shots.

<sup>6</sup> American College of Preventive Medicine. Cervical Cancer Screening: American College of Preventive Medicine Practice Policy Statement. See <http://www.acpm.org/cervical.htm>.



## 2. HMO Enrollee Data by Region

This section provides a comparative analysis of HMO enrollee profiles for 15 regions in the state. It is organized according to the same four categories used in Section 1: sociodemographic characteristics; medical conditions; risk factors; and access and utilization. The exhibits in this section report information for HMO enrollees only; the state-level indicators reflect the entire HMO population for the State of California.

The 15 regions below include 12 metropolitan and 3 rural areas consisting of a single county or groups of counties (described in greater detail in the Technical Appendix; see statewide map, Exhibit 9):

1. Riverside-San Bernardino
2. Orange
3. Los Angeles
4. Ventura
5. Sacramento
6. San Diego
7. San Francisco
8. Santa Cruz
9. Oakland
10. Sonoma
11. Napa-Solano
12. Santa Clara
13. Northern rural
14. Central rural
15. Southern rural

A brief profile of data for each of these regions individually can be found in Section 4.

The percentage of HMO adults who cannot speak English well or at all ranges from 1% in the Northern rural area to 6% in Los Angeles County, the San Francisco region, and Santa Clara County.

### 2.1 SOCIODEMOGRAPHIC CHARACTERISTICS

Sociodemographic indicators reported in this section include citizenship status, years in the United States, language, education level, employment status, gender, age, race, and marital status. Exhibit 5 reports selected sociodemographic indicators characterizing the HMO population by geographic area.

#### *Acculturation and Language*

Three percent of HMO enrollees are recent immigrants living in the U.S. for less than five years. Recent immigrants range from 1% of HMO enrollees in the Southern rural region to 9% in Santa Clara County. The percentage of HMO adults who cannot speak English well or at all ranges from 1% in the Northern rural area to 6% in Los Angeles County, the San Francisco region, and Santa Clara County.

#### *Education*

Among HMO enrollees ages 18-64, 35% have a high school education or less, ranging from 20% in the San Francisco region to 46% in the Central rural region. Among HMO enrollees ages 65 and over, 45% have a high school education or less, ranging from 33% in Santa Cruz County to 57% in the Central rural region.

#### *Race/Ethnicity*

Among HMO enrollees in California, 59% are white, non-Hispanic; 19% are Latino; 12% are Asian American and Pacific Islander; 7% are African American, and 3% are other races.

Asian-American and Pacific Islander HMO enrollment: ranges from 3% in Santa Cruz County and the Southern rural region to 28% in Santa Clara County.

**EXHIBIT 5. SOCIODEMOGRAPHIC CHARACTERISTICS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>CITIZENSHIP STATUS</b>								
U.S.-BORN CITIZEN	73	79	70	64	81	85	82	66
NATURALIZED CITIZEN	15	12	17	20	12	10	11	21
NONCITIZEN WITH GREEN CARD	8	7	9	11	7	4	6	9
NONCITIZEN WITHOUT GREEN CARD	4	2	4	5	–	1	1	4
<b>YEARS IN UNITED STATES (EXCLUDING THOSE BORN IN THE U.S.)</b>								
0-4	3	2	2	3	2	2	3	5
5-9	3	2	3	3	–	2	1	4
10-14	5	4	8	8	2	3	3	6
15-19	4	4	5	5	3	2	2	4
20+	12	9	14	17	11	7	10	14
<b>LANGUAGE SPOKEN AT HOME</b>								
ENGLISH	66	70	66	54	72	81	73	64
SPANISH	4	4	5	6	2	1	2	3
CHINESE	1	–	–	1	–	1	–	4
OTHER ASIAN*	1	0	3	1	–	1	1	1
ENGLISH AND SPANISH	15	18	13	24	18	6	14	7
ENGLISH AND OTHER**	9	5	10	9	4	8	8	16
OTHER***	4	2	3	5	3	2	2	5
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>								
SPEAK ENGLISH VERY WELL/WELL	30	27	29	40	27	17	25	30
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	3	5	6	–	2	2	6
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>								
AGES 18-64	35	43	34	39	35	29	31	20
AGES 65 AND OVER	45	49	40	49	44	37	39	36

\* "Other Asian" includes Vietnamese, Korean, and other Asian languages.  
 \*\* "English and Other" includes English in conjunction with Chinese, European, Asian, or Other as a second language.  
 \*\*\* "Other" includes other single language, and two or more other languages.

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African-American HMO enrollment: ranges from 2% in Orange County and the Northern rural region to 11% in the Oakland region and Napa and Solano counties.

Latino HMO enrollment: ranges from 6% in the Northern rural region to 29% in Los Angeles County.



**EXHIBIT 5. SOCIODEMOGRAPHIC CHARACTERISTICS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	REGION 8 Santa Cruz County	REGION 9 Contra Costa- Alameda Counties	REGION 10 Sonoma County	REGION 11 Napa-Solano Counties	REGION 12 Santa Clara County	REGION 13 Northern Rural Counties	REGION 14 Central Rural Counties	REGION 15 Southern Rural Counties
<b>CITIZENSHIP STATUS</b>								
U.S.-BORN CITIZEN	85	73	84	82	60	91	81	83
NATURALIZED CITIZEN	6	14	9	11	21	5	10	9
NONCITIZEN WITH GREEN CARD	6	9	3	5	12	2	7	6
NONCITIZEN WITHOUT GREEN CARD	3	4	4	2	7	2	2	2
<b>YEARS IN UNITED STATES (EXCLUDING THOSE BORN IN THE U.S.)</b>								
0-4	–	4	2	3	9	–	2	1
5-9	2	3	3	1	4	1	2	3
10-14	2	5	–	3	8	2	3	3
15-19	3	4	2	2	5	1	3	3
20+	7	10	8	10	14	4	10	8
<b>LANGUAGE SPOKEN AT HOME</b>								
ENGLISH	78	68	81	76	54	86	68	74
SPANISH	4	2	4	3	3	1	5	5
CHINESE	–	2	–	–	2	–	0	–
OTHER ASIAN*	–	0	–	–	4	–	1	–
ENGLISH AND SPANISH	12	10	8	9	10	7	18	5
ENGLISH AND OTHER**	4	14	5	8	20	5	6	14
OTHER***	2	4	–	3	7	1	3	2
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>								
SPEAK ENGLISH VERY WELL/WELL	18	28	16	21	40	13	28	22
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	4	3	3	6	1	4	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>								
AGES 18-64	32	26	30	34	25	41	46	40
AGES 65 AND OVER	33	43	45	43	38	50	57	55

\* "Other Asian" includes Vietnamese, Korean, and other Asian languages.  
 \*\* "English and Other" includes English in conjunction with Chinese, European, Asian, or Other as a second language.  
 \*\*\* "Other" includes other single language, and two or more other languages.

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White HMO enrollment: ranges from 44% in Los Angeles County to 84% in Sonoma County and 85% in the Northern rural region.

*Annual Family Income and Federal Poverty Levels*  
 Seventeen percent of the state's HMO population reported family income at or below \$20,000 per year, ranging from 11% in Sonoma County to 23% in the

**EXHIBIT 5. SOCIODEMOGRAPHIC CHARACTERISTICS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>EMPLOYED</b>								
AGES 18-64	75	73	77	75	78	75	78	80
<b>GENDER</b>								
FEMALE	53	54	51	53	50	54	54	50
<b>AGE</b>								
AGES 0-17	31	36	30	33	29	31	29	22
AGES 18-64	59	53	60	58	61	59	60	66
AGES 65 AND OVER	10	11	10	9	10	10	11	12
<b>RACE/ETHNICITY</b>								
ASIAN AMERICAN AND PACIFIC ISLANDER	12	5	13	13	6	12	8	23
AFRICAN AMERICAN	7	6	2	10	3	6	7	5
LATINO	19	22	18	29	19	7	13	9
WHITE	59	63	64	44	69	71	70	60
OTHER	3	4	3	4	3	4	2	3
<b>MARRIED</b>								
AGES 18-64	61	66	62	57	67	63	60	51
AGES 65 AND OVER	57	58	57	52	57	57	62	55
<b>ANNUAL FAMILY INCOME</b>								
\$0-\$10,000	5	7	4	6	5	3	5	5
\$10,001-20,000	12	13	12	15	10	9	12	10
\$20,001-30,000	11	13	10	12	9	11	11	8
\$30,001-40,000	12	14	12	13	11	13	12	9
\$40,001-50,000	10	8	8	11	11	11	11	8
\$50,001-60,000	8	9	7	8	9	10	8	6
\$60,001-\$70,000	8	8	7	7	9	9	8	6
\$70,001-\$80,000	7	7	9	6	8	7	8	7
\$80,000+	27	21	31	22	28	27	25	41
<b>ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS</b>								
<100%	9	10	10	12	6	5	7	7
100%-199%	17	21	15	19	17	14	18	12
200%-299%	15	17	12	16	14	17	15	10
300%+	59	52	63	53	63	64	60	71
<b>HEALTH INSURANCE COVERAGE</b>								
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	17	20	15	23	8	12	15	10
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	17	14	15	22	13	15	11	20

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**EXHIBIT 5. SOCIODEMOGRAPHIC CHARACTERISTICS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	REGION 8 Santa Cruz County	REGION 9 Contra Costa- Alameda Counties	REGION 10 Sonoma County	REGION 11 Napa-Solano Counties	REGION 12 Santa Clara County	REGION 13 Northern Rural Counties	REGION 14 Central Rural Counties	REGION 15 Southern Rural Counties
<b>EMPLOYED</b>								
AGES 18-64	74	73	82	74	77	70	72	69
<b>GENDER</b>								
FEMALE	52	54	53	54	50	50	52	55
<b>AGE</b>								
AGES 0-17	28	29	24	32	27	30	37	33
AGES 18-64	63	62	63	58	64	60	55	57
AGES 65 AND OVER	9	9	13	10	9	10	8	10
<b>RACE/ETHNICITY</b>								
ASIAN AMERICAN AND PACIFIC ISLANDER	3	19	4	9	28	4	6	3
AFRICAN AMERICAN	-	11	-	11	3	2	4	3
LATINO	13	10	10	10	14	6	24	19
WHITE	80	57	84	67	53	85	61	72
OTHER	2	3	1	3	2	3	5	3
<b>MARRIED</b>								
AGES 18-64	55	64	61	68	64	65	66	64
AGES 65 AND OVER	54	59	47	62	55	68	63	59
<b>ANNUAL FAMILY INCOME</b>								
\$0-\$10,000	7	5	3	3	3	6	6	7
\$10,001-20,000	12	7	8	8	9	15	15	16
\$20,001-30,000	7	7	10	8	6	14	12	15
\$30,001-40,000	8	10	12	14	6	13	14	12
\$40,001-50,000	9	8	10	12	5	14	12	10
\$50,001-60,000	9	8	9	9	5	9	9	10
\$60,001-\$70,000	10	8	9	10	8	8	8	8
\$70,001-\$80,000	7	8	8	9	7	7	7	6
\$80,000+	31	39	31	27	51	14	17	16
<b>ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS</b>								
<100%	9	7	6	5	6	11	12	13
100%-199%	16	10	11	13	11	19	21	19
200%-299%	11	13	16	16	8	21	18	18
300%+	64	70	67	66	75	49	49	50
<b>HEALTH INSURANCE COVERAGE</b>								
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	12	10	3	10	10	17	22	22
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	17	16	12	19	18	14	19	22

**EXHIBIT 6. MEDICAL CONDITIONS AND HEALTH STATUS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>HEART DISEASE</b>								
TOLD HAVE HEART DISEASE								
MEN AGES 18-64	5	5	3	5	5	6	4	4
MEN AGES 65 AND OVER	27	32	31	21	30	34	30	24
WOMEN AGES 18-64	4	4	3	4	3	6	3	3
WOMEN AGES 65 AND OVER	19	15	21	20	28	22	17	15
TAKING MEDICATION TO CONTROL HEART DISEASE (PEOPLE WITH HEART DISEASE AGES 18 AND OVER)								
	62	72	69	64	61	62	67	59
<b>HYPERTENSION</b>								
TOLD HAVE HIGH BLOOD PRESSURE*								
MEN AGES 18-34	8	7	10	6	–	12	9	8
MEN AGES 35-64	26	29	20	26	21	29	24	20
MEN AGES 65 AND OVER	52	52	56	48	43	53	53	50
WOMEN AGES 18-44	10	13	6	11	6	11	10	10
WOMEN AGES 45-64	30	32	24	31	26	30	29	29
WOMEN AGES 65 AND OVER	55	46	55	58	67	45	59	48
<b>CHOLESTEROL</b>								
TOLD HAVE HIGH BLOOD CHOLESTEROL*								
MEN AGES 35-64	38	34	44	44	36	37	39	35
MEN AGES 65 AND OVER	26	24	30	27	16	23	27	24
WOMEN AGES 45-64	35	44	37	38	34	25	36	31
WOMEN AGES 65 AND OVER	34	36	46	39	35	28	30	27
HAVE HAD BLOOD CHOLESTEROL TEST WITHIN LAST FIVE YEARS								
MEN AGES 18-34	83	100	77	93	–	91	82	84
MEN AGES 35-64	95	95	94	96	97	94	95	91
MEN AGES 65 AND OVER	98	98	100	98	100	99	96	97
WOMEN AGES 18-44	90	93	100	92	100	89	74	93
WOMEN AGES 45-64	97	97	97	97	100	99	99	96
WOMEN AGES 65 AND OVER	98	97	97	99	97	94	99	95

\* Regular screenings for hypertension and cholesterol should start around age 35 for men and age 45 for women although certain high-risk groups should begin screening earlier. In the instances where younger age groups are not reported, the sample sizes were too small to report for those age categories by geographic region.

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**EXHIBIT 6. MEDICAL CONDITIONS AND HEALTH STATUS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	<b>REGION 8 Santa Cruz County</b>	<b>REGION 9 Contra Costa- Alameda Counties</b>	<b>REGION 10 Sonoma County</b>	<b>REGION 11 Napa-Solano Counties</b>	<b>REGION 12 Santa Clara County</b>	<b>REGION 13 Northern Rural Counties</b>	<b>REGION 14 Central Rural Counties</b>	<b>REGION 15 Southern Rural Counties</b>
<b>HEART DISEASE</b>								
TOLD HAVE HEART DISEASE								
MEN AGES 18-64	6	4	7	5	4	5	5	7
MEN AGES 65 AND OVER	–	33	18	24	29	28	22	23
WOMEN AGES 18-64	4	4	3	3	3	5	5	5
WOMEN AGES 65 AND OVER	14	21	19	25	21	18	20	16
TAKING MEDICATION TO CONTROL HEART DISEASE (PEOPLE WITH HEART DISEASE AGES 18 AND OVER)	37	54	49	68	58	68	55	52
<b>HYPERTENSION</b>								
TOLD HAVE HIGH BLOOD PRESSURE*								
MEN AGES 18-34	–	10	27	4	7	11	8	6
MEN AGES 35-64	16	26	26	28	21	29	32	30
MEN AGES 65 AND OVER	46	59	36	58	57	49	55	57
WOMEN AGES 18-44	8	7	8	12	8	12	13	10
WOMEN AGES 45-64	31	28	23	33	26	31	36	29
WOMEN AGES 65 AND OVER	63	47	51	55	61	60	56	50
<b>CHOLESTEROL</b>								
TOLD HAVE HIGH BLOOD CHOLESTEROL*								
MEN AGES 35-64	39	33	25	35	40	32	38	37
MEN AGES 65 AND OVER	–	29	–	32	20	16	23	30
WOMEN AGES 45-64	43	28	33	31	26	37	39	42
WOMEN AGES 65 AND OVER	26	23	39	39	31	30	30	40
HAVE HAD BLOOD CHOLESTEROL TEST WITHIN LAST FIVE YEARS								
MEN AGES 18-34	–	68	–	92	100	67	73	89
MEN AGES 35-64	87	96	99	95	97	92	93	94
MEN AGES 65 AND OVER	100	99	100	97	100	100	100	94
WOMEN AGES 18-44	71	95	89	87	89	84	83	91
WOMEN AGES 45-64	93	98	94	98	98	97	94	94
WOMEN AGES 65 AND OVER	93	100	98	100	96	100	99	92

\* Regular screenings for hypertension and cholesterol should start around age 35 for men and age 45 for women although certain high-risk groups should begin screening earlier. In the instances where younger age groups are not reported, the sample sizes were too small to report for those age categories by geographic region.

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**EXHIBIT 6. MEDICAL CONDITIONS AND HEALTH STATUS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>DIABETES</b>								
TOLD HAVE DIABETES**								
AGES 18-64	5	6	3	5	4	5	4	4
AGES 65 AND OVER	14	21	13	16	8	13	13	10
<b>ASTHMA</b>								
TOLD HAVE ASTHMA								
AGES 0-17	15	15	12	13	14	16	16	13
AGES 18-64	12	15	9	11	11	14	12	11
AGES 65 AND OVER	10	8	9	9	9	13	10	11
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>								
ANY LIMITATION IN PAST 4 WEEKS								
AGES 18-64	19	19	16	18	14	21	16	17
AGES 65 AND OVER	35	36	32	34	31	36	33	30
<b>SELF-REPORTED HEALTH STATUS: EXCELLENT</b>								
AGES 0-17	40	40	39	39	39	43	44	41
AGES 18-64	22	18	24	20	20	22	24	26
AGES 65 AND OVER	12	13	15	10	14	11	13	15
<b>SELF-REPORTED HEALTH STATUS: FAIR/POOR</b>								
AGES 0-17	8	9	7	8	6	8	7	7
AGES 18-64	14	14	13	15	11	11	11	11
AGES 65 AND OVER	28	28	30	31	30	27	22	30

\*\* The diabetes question was asked of adolescents ages 12-17; however, the sample sizes were too small to report by geographic region.

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**EXHIBIT 6. MEDICAL CONDITIONS AND HEALTH STATUS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	<b>REGION 8 Santa Cruz County</b>	<b>REGION 9 Contra Costa- Alameda Counties</b>	<b>REGION 10 Sonoma County</b>	<b>REGION 11 Napa-Solano Counties</b>	<b>REGION 12 Santa Clara County</b>	<b>REGION 13 Northern Rural Counties</b>	<b>REGION 14 Central Rural Counties</b>	<b>REGION 15 Southern Rural Counties</b>
<b>DIABETES</b>								
TOLD HAVE DIABETES**								
AGES 18-64	3	5	3	5	5	4	6	6
AGES 65 AND OVER	12	10	11	16	11	22	18	13
<b>ASTHMA</b>								
TOLD HAVE ASTHMA								
AGES 0-17	12	15	13	20	19	15	19	16
AGES 18-64	14	14	16	18	12	15	14	14
AGES 65 AND OVER	6	11	7	14	9	15	9	9
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>								
ANY LIMITATION IN PAST 4 WEEKS								
AGES 18-64	19	19	21	21	17	24	22	22
AGES 65 AND OVER	38	31	35	38	28	34	34	40
<b>SELF-REPORTED HEALTH STATUS: EXCELLENT</b>								
AGES 0-17	35	41	45	40	41	38	36	37
AGES 18-64	28	23	24	21	24	21	19	23
AGES 65 AND OVER	11	15	12	9	18	9	11	8
<b>SELF-REPORTED HEALTH STATUS: FAIR/POOR</b>								
AGES 0-17	11	6	4	6	7	7	11	6
AGES 18-64	12	13	9	11	12	14	18	15
AGES 65 AND OVER	28	26	20	28	25	31	32	33

\*\* The diabetes question was asked of adolescents ages 12-17; however, the sample sizes were too small to report by geographic region.

Southern rural region. HMO enrollees with incomes less than 100% of the federal poverty level range from only 5% in Sacramento region and Napa and Solano counties to 13% in the Southern rural region. More than 30% of HMO enrollees have a family income greater than \$80,000 per year in six areas of the state, including Orange County (31%), Santa Cruz County (31%), Sonoma County (31%), the Oakland region (39%), the San Francisco region (41%), and Santa Clara County (51%).

## 2.2 MEDICAL CONDITIONS AND HEALTH STATUS

### *Heart Disease*

Male HMO enrollees, 18-64 years: rates of heart disease range from 3% in Orange County to 7% in Sonoma County and the Southern rural region (see Exhibit 6).

Male HMO enrollees, 65+ years: rates range from 18% in Sonoma County to 34% in the Sacramento region.

Female HMO enrollees, 18-64 years: rates range from 3% in a number of regions to 6% in the Sacramento region.

Female HMO enrollees, 65+ years: rates range from 14% in Santa Cruz County to 28% in Ventura County.

### *Hypertension*

Male HMO enrollees, 35-64 years: hypertension rates range from 16% in Santa Cruz County to 32% in the Central rural region.

Male HMO enrollees, 65+ years: rates range from 36% in Sonoma County to 58% in Napa and Solano counties.

Female HMO enrollees, 45-64 years: rates range from 23% in Sonoma County to 36% in the Central rural region.

Female HMO enrollees, 65+ years: rates range from 46% in the Riverside and San Bernardino counties to 67% in Ventura County.

### *Cholesterol*

For male HMO enrollees ages 35-64, over 90% in every area except for Santa Cruz County (87%) obtained a cholesterol screening within the last five years as recommended. For males ages 65 and over in HMOs, the screening rates are close to 100% in every area.

Most female HMO enrollees ages 45-64 obtained cholesterol screenings as recommended, ranging from 93% in Santa Cruz County to 100% in Ventura County. More than 90% of all female HMO members ages 65 and over obtained recommended cholesterol screenings in all regions.

### *Diabetes*

Five percent of HMO members ages 18-64 and 14% of HMO members age 65 and over reported that they had diabetes. Among those 18-64 years of age, diabetes prevalence did not vary substantially by geographic area of residence. However, among those 65 and over, diabetes prevalence varied from 8% in Ventura County to 22% in the Northern rural region.



### *Asthma*

Asthma rates for HMO enrollees ages 0-17 range from 12% in Orange and Santa Cruz counties to 20% in Napa and Solano counties. For HMO enrollees ages 18-64, asthma rates range from 9% in Orange County to 18% in Napa and Solano counties.

### *Physical Limitations*

Among HMO enrollees, 19% of adults 18-64 years and 35% of adults ages 65 and over reported physical limitations preventing them from doing their work or other activities in the past four weeks. HMO enrollees ages 65 and over experienced more physical limitations, ranging from 28% in Santa Clara County to 40% in the Southern rural area.

### *Health Status*

Self-reported Health among Children, 0-17 years: 8% of children reported (or were reported for by their parents) having fair or poor health status, ranging from 4% in Sonoma County to 11% in Santa Cruz County and the Central rural region.<sup>7</sup>

Self-reported Health among Adults, 18-64 years: 14% of adults reported fair or poor health status, ranging from 9% in Sonoma County to 18% in the Central rural region.

Self-reported Health among Adults, 65 years and over: 28% of seniors reported fair or poor health status, ranging from 20% in Sonoma County to 33% in the Southern rural region.

Underage binge drinking among male HMO enrollees ranges from 15% in the Oakland region to 43% in the Northern rural region.

## 2.3 RISK FACTORS

### *Alcohol Usage*

Binge drinking (defined as drinking more than 5 alcoholic beverages on one occasion) is highest among the 18-20 and 21-25 age groups (see Exhibit 7).

Binge Drinking of HMO enrollees, 18-20 years: 29% of males and 15% of females statewide reported drinking more than five drinks on one occasion in the past month. Underage binge drinking among male HMO enrollees ranges from 15% in the Oakland region to 43% in the Northern rural region.

Binge Drinking of HMO enrollees, 21-25 years: Statewide, 37% of male HMO enrollees and 19% of female enrollees reported binge drinking. College-age binge drinking among males is the lowest in Santa Clara County (10%) and highest in the Southern rural region (59%).

Binge Drinking of HMO enrollees, 26-64 years: The rate of binge drinking among 26-64 year old male HMO members is 23% statewide, ranging from 18% in Santa Clara County to 35% in Sonoma County.

### *Tobacco Usage*

Among adult HMO enrollees ages 18-64, 13% of males and 11% of females smoke every day. Six percent of HMO enrollees ages 65 and older are everyday smokers. Smoking rates (i.e., everyday smoking) for men ages 18-64 range from 10% in Santa Cruz County to 18% in Riverside and San Bernardino counties. For women ages 18-64, smoking rates range from 6% in Santa Clara County to 19% in the Northern rural region.

**EXHIBIT 7. RISK FACTORS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>ALCOHOL USAGE</b>								
ANY DRINKS IN PAST MONTH								
MEN AGES 18-20	46	49	41	50	59	40	56	39
MEN AGES 21-25	73	77	70	68	83	72	77	84
MEN AGES 26-64	71	66	74	68	71	50	71	79
MEN AGES 65 AND OVER	60	60	59	57	58	62	62	60
WOMEN AGES 18-20	44	23	30	36	51	51	34	60
WOMEN AGES 21-25	63	53	46	60	77	60	56	62
WOMEN AGES 26-64	55	48	53	48	58	60	55	63
WOMEN AGES 65 AND OVER	43	43	46	37	47	44	47	53
5+ DRINKS IN PAST MONTH (1+ TIMES)*								
MEN AGES 18-20	29	36	–	27	–	34	31	–
MEN AGES 21-25	37	40	37	36	46	37	39	41
MEN AGES 26-64	23	27	25	23	26	19	25	26
MEN AGES 65 AND OVER	4	8	3	5	5	10	6	11
WOMEN AGES 18-20	15	–	–	12	–	16	17	21
WOMEN AGES 21-25	19	21	10	14	–	13	16	31
WOMEN AGES 26-64	7	7	8	6	7	9	8	11
WOMEN AGES 65 AND OVER	1	1	1	1	1	2	1	2
<b>TOBACCO USAGE</b>								
EVER SMOKED**								
MEN AGES 18-64	46	51	45	46	46	46	47	48
MEN AGES 65 AND OVER	71	74	70	64	68	67	71	64
WOMEN AGES 18-64	35	37	31	30	33	38	35	35
WOMEN AGES 65 AND OVER	42	39	41	37	52	48	44	44
SMOKES EVERY DAY***								
MEN AGES 18-64	13	18	15	14	12	14	15	14
MEN AGES 65 AND OVER	6	8	7	5	2	6	4	5
WOMEN AGES 18-64	11	14	10	8	11	13	11	9
WOMEN AGES 65 AND OVER	6	6	7	6	11	11	5	8

\* This question was only asked of adult respondents who reported at least 1 drink during the past month.

\*\* Defined as at least 100 cigarettes in a lifetime. This variable was not available for the age group 0-17.

\*\*\* This question was only asked of adult respondents who had smoked at least 100 cigarettes in their lifetimes.

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**EXHIBIT 7. RISK FACTORS  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	REGION 8 Santa Cruz County	REGION 9 Contra Costa- Alameda Counties	REGION 10 Sonoma County	REGION 11 Napa-Solano Counties	REGION 12 Santa Clara County	REGION 13 Northern Rural Counties	REGION 14 Central Rural Counties	REGION 15 Southern Rural Counties
<b>ALCOHOL USAGE</b>								
ANY DRINKS IN PAST MONTH								
MEN AGES 18-20	64	34	71	60	52	53	49	51
MEN AGES 21-25	77	71	100	81	62	74	63	78
MEN AGES 26-64	78	71	81	71	68	68	67	69
MEN AGES 65 AND OVER	70	62	72	58	63	55	54	64
WOMEN AGES 18-20	83	37	88	30	30	50	41	45
WOMEN AGES 21-25	75	74	62	61	63	67	56	53
WOMEN AGES 26-64	67	60	68	57	53	56	47	54
WOMEN AGES 65 AND OVER	43	49	69	43	43	46	39	43
5+ DRINKS IN PAST MONTH (1+ TIMES)*								
MEN AGES 18-20	–	15	–	28	–	43	21	24
MEN AGES 21-25	54	34	–	40	10	51	37	59
MEN AGES 26-64	33	23	35	23	18	26	24	27
MEN AGES 65 AND OVER	5	10	8	7	4	6	7	6
WOMEN AGES 18-20	34	11	–	–	–	16	15	23
WOMEN AGES 21-25	44	17	–	8	16	22	19	15
WOMEN AGES 26-64	10	7	9	9	7	8	7	8
WOMEN AGES 65 AND OVER	0	0	4	2	1	2	1	2
<b>TOBACCO USAGE</b>								
EVER SMOKED**								
MEN AGES 18-64	46	42	51	51	40	54	49	48
MEN AGES 65 AND OVER	59	67	70	72	68	68	69	70
WOMEN AGES 18-64	44	36	44	39	25	48	33	37
WOMEN AGES 65 AND OVER	55	41	53	39	44	47	40	45
SMOKES EVERY DAY***								
MEN AGES 18-64	10	11	17	16	13	18	16	17
MEN AGES 65 AND OVER	12	5	5	10	5	8	7	6
WOMEN AGES 18-64	12	11	14	12	6	19	12	13
WOMEN AGES 65 AND OVER	8	5	6	5	7	8	7	5

\* This question was only asked of adult respondents who reported at least 1 drink during the past month.  
 \*\* Defined as at least 100 cigarettes in a lifetime. This variable was not available for the age group 0-17.  
 \*\*\* This question was only asked of adult respondents who had smoked at least 100 cigarettes in their lifetimes.

**EXHIBIT 8. ACCESS AND UTILIZATION  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>HOSPITAL STAYS</b>								
STAYED OVERNIGHT/LAST 12 MONTHS	9	9	8	9	10	10	8	8
<b>TIMES A DOCTOR SEEN IN 12 MONTHS (AGES 18 AND OVER)*</b>								
0 TIMES	13	13	14	13	11	11	12	14
1 TIME	22	19	22	21	22	22	22	24
2 TIMES	19	20	20	18	21	19	19	20
3 TIMES	12	12	12	13	11	11	13	13
4 TIMES	9	11	10	9	9	10	9	8
5+ TIMES	25	25	22	26	26	27	25	21
<b>DELAY IN NECESSARY MEDICAL CARE</b>								
DELAYED/DID NOT GET CARE	13	11	11	14	14	16	12	13
DELAYED/DID NOT GET PRESCRIPTION	10	11	10	10	10	10	11	7
DELAYED/DID NOT GET TEST OR TREATMENT	9	6	8	8	9	9	9	9
<b>USUAL SOURCE OF CARE</b>								
HAVE A USUAL SOURCE OF CARE	94	96	94	94	93	96	96	95
<b>PERCEIVED DISCRIMINATION</b>								
HAVE EXPERIENCED	5	5	5	5	3	5	4	3

\*Adolescents (12-17) were not asked about time since last doctor visit.

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## 2.4 ACCESS AND UTILIZATION

### *Utilization*

Most HMO enrollees, ages 18 and over, reported visiting the doctor in the past 12 months (see Exhibit 8). Percentages without a visit to the doctor in the past year range from 11% in Ventura County, the Sacramento region, and the Northern rural region to 14% in Orange County, the San Francisco region, and Santa Cruz County.

HMO enrollees who delayed or failed to obtain medical care they felt they needed ranged from 11% in Riverside and San Bernardino counties to 23% in Santa Cruz County.

### *Discrimination*

Five percent of HMO enrollees reported they had experienced discrimination during the past 12 months when receiving medical care, ranging from 3% in the San Francisco region to 7% in Santa Cruz County.

**EXHIBIT 8. ACCESS AND UTILIZATION  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	REGION 8 Santa Cruz County	REGION 9 Contra Costa- Alameda Counties	REGION 10 Sonoma County	REGION 11 Napa-Solano Counties	REGION 12 Santa Clara County	REGION 13 Northern Rural Counties	REGION 14 Central Rural Counties	REGION 15 Southern Rural Counties
<b>HOSPITAL STAYS</b>								
STAYED OVERNIGHT/LAST 12 MONTHS	8	9	6	9	8	10	9	11
<b>TIMES A DOCTOR SEEN IN 12 MONTHS (AGES 18 AND OVER)*</b>								
0 TIMES	14	12	12	12	13	11	12	12
1 TIME	24	24	25	21	23	22	21	21
2 TIMES	18	18	17	20	23	18	18	17
3 TIMES	12	14	11	12	13	11	11	11
4 TIMES	8	9	12	10	7	10	10	10
5+ TIMES	24	23	23	25	21	28	28	29
<b>DELAY IN NECESSARY MEDICAL CARE</b>								
DELAYED/DID NOT GET CARE	23	12	13	13	13	16	13	13
DELAYED/DID NOT GET PRESCRIPTION	11	10	8	9	8	13	11	12
DELAYED/DID NOT GET TEST OR TREATMENT	9	11	11	10	7	9	9	9
<b>USUAL SOURCE OF CARE</b>								
HAVE A USUAL SOURCE OF CARE	95	96	98	96	94	95	95	95
<b>PERCEIVED DISCRIMINATION</b>								
HAVE EXPERIENCED	7	4	6	5	3	6	5	5

\*Adolescents (12-17) were not asked about time since last doctor visit.

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*Breast Cancer Screening*

Among female HMO enrollees 40 years of age and over, 92% have had at least one mammography in their lifetimes, ranging from 88% in Ventura County to 95% in the Sacramento region. In California, 12% of HMO enrollees have not had a mammogram within the recommended time frame of two years, ranging from 9% in Napa and Solano counties to 18% in Santa Clara County.

*Cervical Cancer Screening*

Ninety-five percent of adult women ages 18-64 with HMO coverage and 96% ages 65 and over reported having at least one cervical cancer screening in their lifetimes.

Female HMO enrollees, 18-64 years: 22% did not receive a pap test within the past 12 months, ranging from 20% in the San Francisco region to 27% in the Sacramento region, Sonoma County, and the Northern rural region.

**EXHIBIT 8. ACCESS AND UTILIZATION  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	CALIFORNIA	REGION 1 Riverside-San Bernardino Counties	REGION 2 Orange County	REGION 3 Los Angeles County	REGION 4 Ventura County	REGION 5 Sacramento Yolo-Placer- El Dorado Counties	REGION 6 San Diego- Imperial Counties	REGION 7 San Francisco- Marin- San Mateo Counties
<b>BREAST CANCER SCREENING (WOMEN AGES 40 AND OVER)</b>								
HAD MAMMOGRAM	92	93	93	91	88	95	91	93
MOST RECENT MAMMOGRAM								
A YEAR AGO OR LESS	64	65	63	64	65	66	60	70
1-2 YEARS AGO	16	18	17	16	15	14	14	13
MORE THAN 2 YEARS AGO	12	13	12	13	13	11	14	12
ABNORMAL MAMMOGRAM RESULTS	20	22	21	19	22	23	20	23
<b>CERVICAL CANCER SCREENING (WOMEN AGES 18 AND OVER)</b>								
EVER HAD PAP SMEAR TEST								
WOMEN AGES 18-64	95	93	91	91	91	95	93	92
WOMEN AGES 65 AND OVER	96	95	95	95	96	96	96	95
MOST RECENT PAP SMEAR TEST 1+ YEARS								
WOMEN AGES 18-64	22	25	22	22	21	27	25	20
WOMEN AGES 65 AND OVER	43	52	40	45	49	42	46	42
PORTION WHO RECEIVED MORE TESTS/TREATMENTS AFTER								
ABNORMAL PAP RESULT								
WOMEN AGES 18-64	91	92	89	88	86	94	91	94
WOMEN AGES 65 AND OVER	83	84	77	84	93	92	88	85
<b>CHILDHOOD IMMUNIZATIONS</b>								
OBTAINED DOCTOR/CLINIC REMINDERS	51	52	50	49	44	52	47	60
HAVE HAD DIFFICULTY GETTING SHOTS	2	3	3	2	-	1	3	1

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Female HMO enrollees, 65+ years: 43% did not meet the health guidelines for getting a pap test every year, ranging from 40% in Orange County to 55% in Napa and Solano counties.

*Childhood Immunizations*

HMO members did not have difficulty obtaining shots for their children ages 0-11; less than 4% in each area expressed difficulty. Fifty-one percent of HMO members with children obtained reminders from their doctors or clinics regarding immunizations, ranging from 44% in Ventura County to 61% in Sonoma County.

**EXHIBIT 8. ACCESS AND UTILIZATION  
HMO ENROLLEE PROFILE BY 15 GEOGRAPHIC REGIONS, CHIS 2001 (CONTINUED)**

	REGION 8 Santa Cruz County	REGION 9 Contra Costa- Alameda Counties	REGION 10 Sonoma County	REGION 11 Napa-Solano Counties	REGION 12 Santa Clara County	REGION 13 Northern Rural Counties	REGION 14 Central Rural Counties	REGION 15 Southern Rural Counties
<b>BREAST CANCER SCREENING (WOMEN AGES 40 AND OVER)</b>								
HAD MAMMOGRAM	91	92	94	93	94	92	91	91
MOST RECENT MAMMOGRAM								
A YEAR AGO OR LESS	67	67	67	66	60	60	68	64
1-2 YEARS AGO	13	16	13	17	17	20	14	15
MORE THAN 2 YEARS AGO	11	10	11	9	18	12	12	13
ABNORMAL MAMMOGRAM RESULTS	32	18	22	19	23	24	22	20
<b>CERVICAL CANCER SCREENING (WOMEN AGES 18 AND OVER)</b>								
EVER HAD PAP SMEAR TEST								
WOMEN AGES 18-64	95	94	95	94	92	95	92	95
WOMEN AGES 65 AND OVER	97	94	97	99	96	97	97	97
MOST RECENT PAP SMEAR TEST 1+ YEARS								
WOMEN AGES 18-64	22	22	27	29	22	27	24	24
WOMEN AGES 65 AND OVER	51	49	47	55	50	52	45	48
PORTION WHO RECEIVED MORE TESTS/TREATMENTS AFTER								
ABNORMAL PAP RESULT								
WOMEN AGES 18-64	89	91	90	94	88	93	92	91
WOMEN AGES 65 AND OVER	100	82	86	96	82	93	83	84
<b>CHILDHOOD IMMUNIZATIONS</b>								
OBTAINED DOCTOR/CLINIC REMINDERS	46	55	61	53	59	47	51	47
HAVE HAD DIFFICULTY GETTING SHOTS	-	3	-	2	3	2	3	1





## 3. Policy and Programmatic Implications

# 3

This section discusses some of the major implications for public policy and for programmatic responses by HMOs related to the findings presented in Sections 1 and 2.

### SOCIODEMOGRAPHIC CHARACTERISTICS

#### *Language, Education, and Race/Ethnicity*

The ethnic diversity and variations in language fluency of California's HMO population indicate potential barriers to HMO members in understanding HMO policies and programs. Thus, when preparing materials for distribution and outreach, HMOs should emphasize provision of information in different languages and adapted for cultural variations in the member populations. Because the level of educational attainment of HMO enrollees varies within the state, the OPA has an opportunity to set standards governing the development of written materials by HMOs so that policies and benefits are clearly communicated to HMO enrollees with a high school education or less. Improved communication between HMOs and their membership can improve access to needed services and the quality of care.

### MEDICAL CONDITIONS AND HEALTH STATUS

#### *Asthma*

Fifteen percent of children ages 0-17 enrolled in California's HMOs were informed by their medical provider they have asthma. Percentages of childhood asthma ranged from 12% in Santa Cruz and Orange counties to 20% in Napa and Solano counties.

Asthma, a potential danger to the health of all children, is the leading cause of serious illness in children. Asthma ranks eighth in prevalence among chronic diseases and occurs in disproportionate rates

among people of different ethnic and cultural backgrounds.<sup>8</sup> Since childhood asthma is on the rise, HMOs should assure that appropriate quality controls are implemented to diagnose and manage the disease effectively.

#### *Physical Limitations*

HMO members in younger age groups reported few physical limitations. However, statewide more than one-third of older persons (35%) in HMOs reported some physical limitation. The percentages of HMO members 65 years and older reporting physical limitations ranged from 30% in the San Francisco region to 40% in the Southern rural region.

As the population ages, Medicare HMOs will need to respond to the unique medical and social needs of older people. HMOs should be encouraged to partner with community social service providers to create a community-level infrastructure to address the unique needs of older persons, e.g., access to cost-effective disease management programs and methods of extending years of independent living.

### RISK FACTORS

#### *Alcohol Use and Binge Drinking*

Alcohol use and abuse is particularly high among young adult HMO enrollees ages 18-25. Twenty-nine percent of males and 15% of females ages 18-20 and 37% of males and 19% of females ages 21-25 reported drinking more than five drinks on one occasion in the past month. These findings point to the importance of continuing current and developing new media awareness campaigns directed at adolescents and young adults that communicate the dangers of binge drinking

8 Brown ER, Meng YY, Babey SH, Malcolm E. *Asthma in California in 2001: High Rates Affect Most Population Groups*. Los Angeles: California Health Interview Survey Policy Brief, UCLA Center for Health Policy Research, May 2002.

and provide resources for those who seek more information. These campaigns would be especially effective if additional outreach at school and college campuses could be implemented, whether through the health office or otherwise. Binge drinking is not only an unhealthy practice, negatively affecting the individual, but it also has cost implications for HMOs in terms of doctor visits, emergency room visits, and prescription drug coverage.

#### *Tobacco Use*

Thirteen percent of adult male and 11% of adult female HMO enrollees ages 18-64 smoke every day. Tobacco use and exposure is the single most important source of preventable morbidity, disability and premature mortality.<sup>9</sup> In 1999, 38,233 people died from smoking-related diseases in the State of California alone.<sup>10</sup>

Smoking cessation is a cost-effective route that improves the health of individuals. HMOs and state health agencies should continue media awareness campaigns and assess the feasibility of providing smoking cessation drugs for members who may need assistance in quitting.

## ACCESS AND UTILIZATION

#### *Doctor Visits and Delays in Needed Care*

HMO members reported virtually the same number of doctor visits during the past 12 months as those with non-HMO insurance. This information, combined with other data indicating that HMO and non-HMO populations are essentially identical with respect to a number of other sociodemographic variables and

health status, demonstrates that HMO members in general have access to doctor's services comparable to those with non-HMO insurance. However, 13% of HMO members report that they delayed or did not receive needed care. The OPA and HMOs should work to identify why members delay or do not receive care and to reduce barriers to access.

#### *Discrimination*

Statewide, 5% of HMO enrollees reported having experienced some form of discrimination from their health-care provider during the past 12 months. Effective outreach by the OPA and by HMOs is one mechanism for reducing perceived and actual discrimination. HMOs should continue to monitor sources of discrimination reported by members in their interactions with providers and staff. Improving cultural and linguistic competency among HMO staff is another mechanism for reducing perceptions of discrimination.

#### *Breast Cancer Screening*

Breast cancer is the second leading cause of cancer-related death among women in the United States.<sup>11</sup> Diagnosis at early stages is crucial. In 2001, an estimated 192,200 women were diagnosed with breast cancer, and 40,600 women died from the disease.<sup>12</sup> The U.S. Preventive Services Task Force recommends mammograms every one to two years for women ages 40 and over.<sup>13</sup>

9 Bartal M. Health effects of tobacco use and exposure. *Monaldi Arch Chest Dis*. 2001 Dec.;56(6):545-54.

10 California Tobacco Statistics. CDC. See [http://www.cdc.gov/tobacco/statehi/pdf\\_2002/california.pdf](http://www.cdc.gov/tobacco/statehi/pdf_2002/california.pdf).

11 McCarthy EP, Burns RB, Coughlin SS, Freund KM, Rice J, Marwill SL, Ash A, Shwartz M, Moskowitz MA. Mammography use helps to explain differences in breast cancer stage at diagnosis between older black and white women. *Annals of Internal Medicine*. 1998 May 1;128(9):729-36.

12 HHS News. HHS affirms value of mammography for detecting breast cancer. See <http://www.hhs.gov/news/press/2002pres/20020221.html>.

13 U.S. Preventive Services Task Force. Screening for Breast Cancer: Recommendations and Rationale. See <http://www.ahcpr.gov/clinic/3rduspstf/breastcancer/brcanrr.htm>.

Over 90% of all female HMO members in the state are in compliance with this recommendation, while 22% of the female HMO population has received an abnormal mammogram result at some point in their lifetimes. Thus, given that mammograms are an effective tool in early detection and survival, it is important to ensure that this group of female HMO enrollees receives regular screenings for breast cancer.

#### *Cervical Cancer Screening*

Statewide, 78% of female HMO members ages 18-64, and 51% ages 65 and over, reported having a pap test in the past year. According to recommendations of the American College of Preventive Medicine, women 18 and older and all females who are sexually active (including those younger than 18) should have pap smears annually until they have received at least three consecutive normal results, and thereafter, pap smears at least every three years.<sup>14</sup> Cervical cancer screening initiatives could be increased so that most female HMO members are screened regularly. Also, the information on gaps in cervical cancer screenings in the state could be used by the federally funded Breast and Cervical Cancer Control Program (BCCCP) to support community networks, including HMOs, in order to increase screening utilization in low-income subgroups.

#### *Childhood Immunizations*

Only 44% to 61% of HMO members received reminders from their doctors or clinics to obtain immunizations for their children, indicating a cost-effective area for improving medical care for the youngest HMO enrollees. Vaccination is the main

public health intervention that effectively reduces disease and mortality rates.<sup>15</sup> Thus, it is imperative to continue to communicate to parents regarding the importance of childhood vaccination.

#### CONCLUSION

This report presents a more detailed profile of the ethnic, racial, language, educational, and geographic diversity of California's HMO population than has previously been possible, using recently available data from CHIS 2001. A number of health plan performance-reporting measures have been implemented during the past decade to improve the information available to HMO members for assessing the quality of services provided by their plans, including efforts by the OPA to compile performance measures into a readily available format. While those efforts focus on plan effectiveness, this report focuses on population-based differences in demographic characteristics, prevalence of medical conditions and risk factors, and access to care across geographic regions of California. Our findings suggest that the considerable variation within the state related to English proficiency and educational attainment creates potential barriers to effective communication between HMOs and their membership. Further reporting of HMO language services and the development of additional performance measures may be needed to guarantee that HMO members with limited English proficiency gain access to the same quality care and service as those without such language barriers.

14 American College of Preventive Medicine. Cervical Cancer Screening: American College of Preventive Medicine Practice Policy Statement. See <http://www.acpm.org/cervical.htm>.

15 Kane M, Lasher H. The Case for Childhood Immunization. Children's Vaccine Program at PATH: Occasional Paper #5. March 2002. See [www.ChildrensVaccine.org](http://www.ChildrensVaccine.org).



## 4. Regional Profiles

# 4

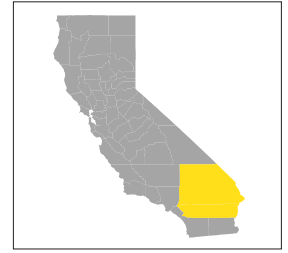
This section presents the individual HMO enrollee profiles by geographic region, noting those indicators that appear to be higher or lower than overall state averages. Selected indicators from the four categories

of characteristics presented in Section 2 are reported in each profile. Results reported are for the HMO population only. Exhibit 9 shows the 15 metropolitan and nonmetropolitan regions used in this study.

**EXHIBIT 9. STATEWIDE MAP OF CALIFORNIA'S 15 METROPOLITAN AND NONMETROPOLITAN AREAS**



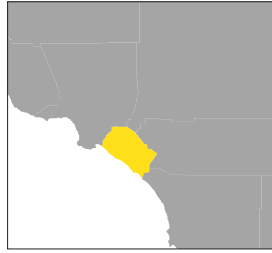
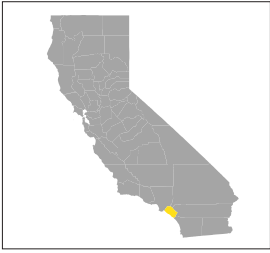
*Area 1  
Riverside and San Bernardino Counties  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 1</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	91	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	70	66
SPANISH	4	4
ENGLISH AND SPANISH	18	15
ENGLISH AND OTHER	5	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	3	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	43	35
AGES 65 AND OVER	49	45
<b>AGE</b>		
AGES 0-17	36	31
AGES 18-64	53	59
AGES 65 AND OVER	11	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	5	12
AFRICAN AMERICAN	6	7
LATINO	22	19
WHITE	63	59
OTHER	4	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	10	9
100%-199%	21	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	20	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	14	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	11	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	19	19
AGES 65 AND OVER	36	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	40	40
AGES 18-64	18	22
AGES 65 AND OVER	13	12
FAIR/POOR HEALTH		
AGES 0-17	9	8
AGES 18-64	14	14
AGES 65 AND OVER	28	28

\* Information not available for 0-17 year olds.

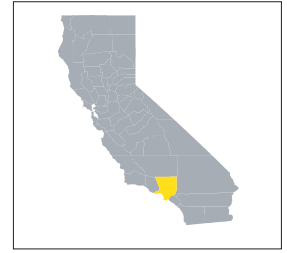
*Area 2  
Orange County  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 2</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	87	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	66	66
SPANISH	5	4
ENGLISH AND SPANISH	13	15
ENGLISH AND OTHER	10	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	5	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	34	35
AGES 65 AND OVER	40	45
<b>AGE</b>		
AGES 0-17	30	31
AGES 18-64	60	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	13	12
AFRICAN AMERICAN	2	7
LATINO	18	19
WHITE	64	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	10	9
100%-199%	15	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	15	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	15	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	11	13
<b>EXPERIENCES PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	16	19
AGES 65 AND OVER	32	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	39	40
AGES 18-64	24	22
AGES 65 AND OVER	15	12
FAIR/POOR HEALTH		
AGES 0-17	7	8
AGES 18-64	13	14
AGES 65 AND OVER	30	28

\* Information not available for 0-17 year olds.

Area 3  
 Los Angeles County  
 Profile of HMO Enrollees, CHIS 2001

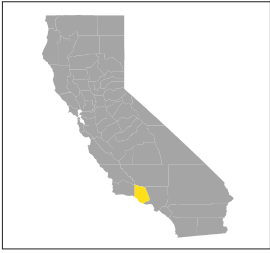


<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 3</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	84	88
<b>YEARS IN UNITED STATES</b>		
0-4	3	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	54	66
SPANISH	6	4
ENGLISH AND SPANISH	24	15
ENGLISH AND OTHER	9	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	6	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	39	35
AGES 65 AND OVER	49	45
<b>AGE</b>		
AGES 0-17	33	31
AGES 18-64	58	59
AGES 65 AND OVER	9	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	13	12
AFRICAN AMERICAN	10	7
LATINO	29	19
WHITE	44	59
OTHER	4	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	12	9
100%-199%	19	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	23	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	22	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	14	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	18	19
AGES 65 AND OVER	34	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	39	40
AGES 18-64	20	22
AGES 65 AND OVER	10	12
FAIR/POOR HEALTH		
AGES 0-17	8	8
AGES 18-64	15	14
AGES 65 AND OVER	31	28

\* Information not available for 0-17 year olds.



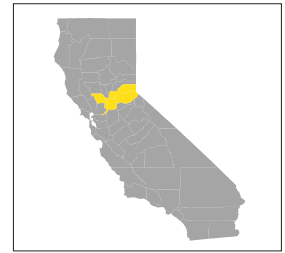
Area 4  
Ventura County  
Profile of HMO Enrollees, CHIS 2001



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 4</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	93	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	72	66
SPANISH	2	4
ENGLISH AND SPANISH	18	15
ENGLISH AND OTHER	4	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	-	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	35	35
AGES 65 AND OVER	44	45
<b>AGE</b>		
AGES 0-17	29	31
AGES 18-64	61	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	6	12
AFRICAN AMERICAN	3	7
LATINO	19	19
WHITE	69	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	6	9
100%-199%	17	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	8	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	13	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	14	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	14	19
AGES 65 AND OVER	31	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	39	40
AGES 18-64	20	22
AGES 65 AND OVER	14	12
FAIR/POOR HEALTH		
AGES 0-17	6	8
AGES 18-64	11	14
AGES 65 AND OVER	30	28

\* Information not available for 0-17 year olds.

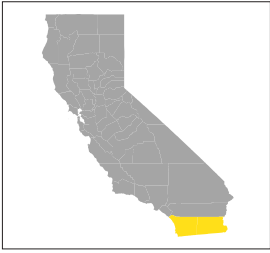
Area 5  
 Sacramento, Yolo, Placer, and  
 El Dorado Counties  
 Profile of HMO Enrollees, CHIS 2001



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 5</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	95	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	81	66
SPANISH	1	4
ENGLISH AND SPANISH	6	15
ENGLISH AND OTHER	8	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	2	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	29	35
AGES 65 AND OVER	37	45
<b>AGE</b>		
AGES 0-17	31	31
AGES 18-64	59	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	12	12
AFRICAN AMERICAN	6	7
LATINO	7	19
WHITE	71	59
OTHER	4	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	5	9
100%-199%	14	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	12	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	15	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	16	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	21	19
AGES 65 AND OVER	36	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	43	40
AGES 18-64	22	22
AGES 65 AND OVER	11	12
FAIR/POOR HEALTH		
AGES 0-17	8	8
AGES 18-64	11	14
AGES 65 AND OVER	27	28

\* Information not available for 0-17 year olds.

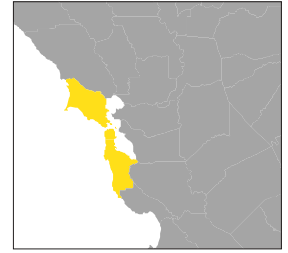
*Area 6  
San Diego and Imperial Counties  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 6</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	93	88
<b>YEARS IN UNITED STATES</b>		
0-4	3	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	73	66
SPANISH	2	4
ENGLISH AND SPANISH	14	15
ENGLISH AND OTHER	8	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	2	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	31	35
AGES 65 AND OVER	39	45
<b>AGE</b>		
AGES 0-17	29	31
AGES 18-64	60	59
AGES 65 AND OVER	11	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	8	12
AFRICAN AMERICAN	7	7
LATINO	13	19
WHITE	70	59
OTHER	2	3
<b>HEALTH INSURANCE AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	7	9
100%-199%	18	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	15	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	11	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	12	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	16	19
AGES 65 AND OVER	33	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	44	40
AGES 18-64	24	22
AGES 65 AND OVER	13	12
FAIR/POOR HEALTH		
AGES 0-17	7	8
AGES 18-64	11	14
AGES 65 AND OVER	22	28

\* Information not available for 0-17 year olds.

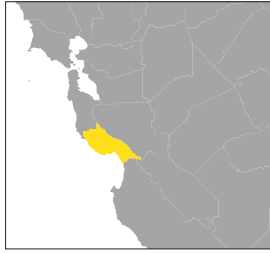
*Area 7  
San Francisco, Marin, and San Mateo  
Counties  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 7</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	87	88
<b>YEARS IN UNITED STATES</b>		
0-4	15	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	64	66
SPANISH	3	4
ENGLISH AND SPANISH	7	15
ENGLISH AND OTHER	16	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	6	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	20	35
AGES 65 AND OVER	36	45
<b>AGE</b>		
AGES 0-17	22	31
AGES 18-64	66	59
AGES 65 AND OVER	12	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	23	12
AFRICAN AMERICAN	5	7
LATINO	9	19
WHITE	60	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	7	9
100%-199%	12	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	10	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	20	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	17	19
AGES 65 AND OVER	30	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	41	40
AGES 18-64	26	22
AGES 65 AND OVER	15	12
FAIR/POOR HEALTH		
AGES 0-17	7	8
AGES 18-64	11	14
AGES 65 AND OVER	30	28

\* Information not available for 0-17 year olds.

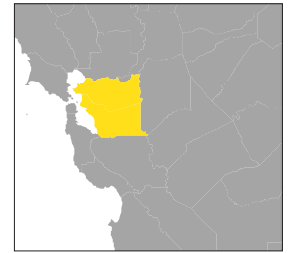
*Area 8  
Santa Cruz County  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 8</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	91	88
<b>YEARS IN UNITED STATES</b>		
0-4	-	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	78	66
SPANISH	4	4
ENGLISH AND SPANISH	12	15
ENGLISH AND OTHER	4	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	32	35
AGES 65 AND OVER	33	45
<b>AGE</b>		
AGES 0-17	28	31
AGES 18-64	63	59
AGES 65 AND OVER	9	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	3	12
AFRICAN AMERICAN	-	7
LATINO	13	19
WHITE	80	59
OTHER	2	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	9	9
100%-199%	16	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	12	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	17	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	23	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	19	19
AGES 65 AND OVER	38	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	35	40
AGES 18-64	28	22
AGES 65 AND OVER	11	12
FAIR/POOR HEALTH		
AGES 0-17	11	8
AGES 18-64	12	14
AGES 65 AND OVER	28	28

\* Information not available for 0-17 year olds.

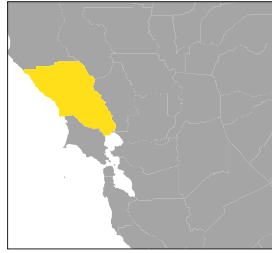
*Area 9  
Contra Costa and Alameda Counties  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 9</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	87	88
<b>YEARS IN UNITED STATES</b>		
0-4	4	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	68	66
SPANISH	2	4
ENGLISH AND SPANISH	10	15
ENGLISH AND OTHER	14	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	26	35
AGES 65 AND OVER	43	45
<b>AGE</b>		
AGES 0-17	29	31
AGES 18-64	62	59
AGES 65 AND OVER	9	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	19	12
AFRICAN AMERICAN	11	7
LATINO	10	19
WHITE	57	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	7	9
100%-199%	10	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	10	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	16	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	12	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	19	19
AGES 65 AND OVER	31	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	41	40
AGES 18-64	23	22
AGES 65 AND OVER	15	12
FAIR/POOR HEALTH		
AGES 0-17	6	8
AGES 18-64	13	14
AGES 65 AND OVER	26	28

\* Information not available for 0-17 year olds.

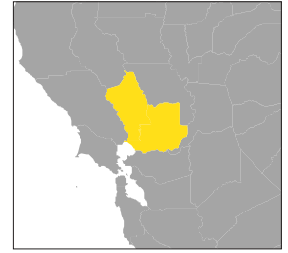
*Area 10  
Sonoma County  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 10</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	93	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	81	66
SPANISH	4	4
ENGLISH AND SPANISH	8	15
ENGLISH AND OTHER	5	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	3	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	30	35
AGES 65 AND OVER	45	45
<b>AGE</b>		
AGES 0-17	24	31
AGES 18-64	63	59
AGES 65 AND OVER	13	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	4	12
AFRICAN AMERICAN	-	7
LATINO	10	19
WHITE	84	59
OTHER	1	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	6	9
100%-199%	11	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	3	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	12	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	21	19
AGES 65 AND OVER	35	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	45	40
AGES 18-64	24	22
AGES 65 AND OVER	12	12
FAIR/POOR HEALTH		
AGES 0-17	4	8
AGES 18-64	9	14
AGES 65 AND OVER	20	28

\* Information not available for 0-17 year olds.

*Area 11  
Napa and Solano Counties  
Profile of HMO Enrollees, CHIS 2001*

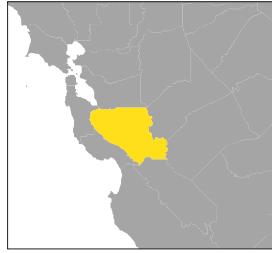


<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 11</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	93	88
<b>YEARS IN UNITED STATES</b>		
0-4	3	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	76	66
SPANISH	3	4
ENGLISH AND SPANISH	9	15
ENGLISH AND OTHER	8	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	3	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	34	35
AGES 65 AND OVER	43	45
<b>AGE</b>		
AGES 0-17	32	31
AGES 18-64	58	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	9	12
AFRICAN AMERICAN	11	7
LATINO	10	19
WHITE	67	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	5	9
100%-199%	13	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	10	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	19	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	21	19
AGES 65 AND OVER	38	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	40	40
AGES 18-64	21	22
AGES 65 AND OVER	9	12
FAIR/POOR HEALTH		
AGES 0-17	6	8
AGES 18-64	11	14
AGES 65 AND OVER	28	28

\* Information not available for 0-17 year olds.



*Area 12  
Santa Clara County  
Profile of HMO Enrollees, CHIS 2001*

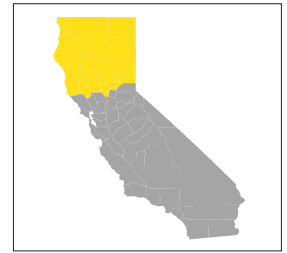


<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 12</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	81	88
<b>YEARS IN UNITED STATES</b>		
0-4	9	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	54	66
SPANISH	3	4
ENGLISH AND SPANISH	10	15
ENGLISH AND OTHER	20	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	6	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	25	35
AGES 65 AND OVER	38	45
<b>AGE</b>		
AGES 0-17	27	31
AGES 18-64	64	59
AGES 65 AND OVER	9	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	28	12
AFRICAN AMERICAN	3	7
LATINO	14	19
WHITE	53	59
OTHER	2	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	6	9
100%-199%	11	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	10	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	18	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	17	19
AGES 65 AND OVER	28	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	41	40
AGES 18-64	24	22
AGES 65 AND OVER	18	12
FAIR/POOR HEALTH		
AGES 0-17	7	8
AGES 18-64	12	14
AGES 65 AND OVER	25	28

\* Information not available for 0-17 year olds.

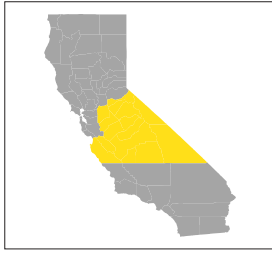
## Area 13

*Northern California Rural Counties: Butte, Glenn, Tehama, Colusa, Del Norte, Humboldt, Lake, Lassen, Modoc, Mendocino, Nevada, Plumas, Shasta, Sierra, Siskiyou, Trinity, Sutter, and Yuba*  
*Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 13</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	96	88
<b>YEARS IN UNITED STATES</b>		
0-4	-	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	86	66
SPANISH	1	4
ENGLISH AND SPANISH	7	15
ENGLISH AND OTHER	5	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	1	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	41	35
AGES 65 AND OVER	50	45
<b>AGE</b>		
AGES 0-17	30	31
AGES 18-64	60	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	4	12
AFRICAN AMERICAN	2	7
LATINO	6	19
WHITE	85	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	11	9
100%-199%	19	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	17	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	14	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	16	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	24	19
AGES 65 AND OVER	34	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	38	40
AGES 18-64	21	22
AGES 65 AND OVER	9	12
FAIR/POOR HEALTH		
AGES 0-17	7	8
AGES 18-64	14	14
AGES 65 AND OVER	31	28

\* Information not available for 0-17 year olds.

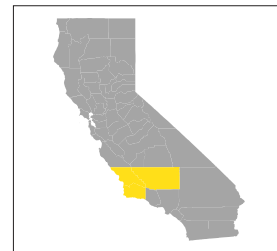


*Area 14  
Central California Rural Counties: Alpine,  
Amador, Calaveras, Fresno, Inyo, Madera,  
Merced, Monterey, Mono, Kings, San  
Benito, Tuolumne, Mariposa, San Joaquin,  
Stanislaus, and Tulare  
Profile of HMO Enrollees, CHIS 2001*

<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 14</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	91	88
<b>YEARS IN UNITED STATES</b>		
0-4	2	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	68	66
SPANISH	5	4
ENGLISH AND SPANISH	18	15
ENGLISH AND OTHER	6	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	46	35
AGES 65 AND OVER	57	45
<b>AGE</b>		
AGES 0-17	37	31
AGES 18-64	55	59
AGES 65 AND OVER	8	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	6	12
AFRICAN AMERICAN	4	7
LATINO	24	19
WHITE	61	59
OTHER	5	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	12	9
100%-199%	21	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	22	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	19	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	22	19
AGES 65 AND OVER	34	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	36	40
AGES 18-64	19	22
AGES 65 AND OVER	11	12
FAIR/POOR HEALTH		
AGES 0-17	11	8
AGES 18-64	18	14
AGES 65 AND OVER	32	28

\* Information not available for 0-17 year olds.

*Area 15  
Southern California Rural Counties: Kern,  
Santa Barbara, and San Luis Obispo  
Profile of HMO Enrollees, CHIS 2001*



<b>SOCIODEMOGRAPHIC CHARACTERISTICS</b>	<b>AREA 15</b>	<b>CALIFORNIA</b>
<b>CITIZENSHIP STATUS</b>		
U.S.-BORN/NATURALIZED CITIZENS	92	88
<b>YEARS IN UNITED STATES</b>		
0-4	1	3
<b>LANGUAGE SPOKEN AT HOME</b>		
ENGLISH	74	66
SPANISH	5	4
ENGLISH AND SPANISH	5	15
ENGLISH AND OTHER	14	9
<b>ENGLISH PROFICIENCY (EXCLUDING ENGLISH-ONLY SPEAKERS)</b>		
SPEAK ENGLISH NOT WELL/NOT AT ALL	4	4
<b>EDUCATION LEVEL (HIGH SCHOOL OR LESS)</b>		
AGES 18-64	40	35
AGES 65 AND OVER	55	45
<b>AGE</b>		
AGES 0-17	33	31
AGES 18-64	57	59
AGES 65 AND OVER	10	10
<b>RACE/ETHNICITY</b>		
ASIAN AMERICAN AND PACIFIC ISLANDER	3	12
AFRICAN AMERICAN	3	7
LATINO	19	19
WHITE	72	59
OTHER	3	3
<b>HEALTH INSURANCE STATUS AND ANNUAL FAMILY INCOME</b>		
ANNUAL FAMILY INCOME RELATIVE TO FEDERAL POVERTY LEVELS		
<100%	13	9
100%-199%	19	17
HEALTH INSURANCE COVERAGE		
MEDI-CAL AND OTHER PUBLIC INSURANCE (AGES 0-64)	22	17
MEDICARE AND MEDI-CAL (AGES 65 AND OVER)	22	17
<b>ACCESS AND UTILIZATION</b>		
DELAYED OR DID NOT GET		
MEDICAL CARE THOUGHT NEEDED	13	13
<b>EXPERIENCED PHYSICAL LIMITATIONS</b>		
ANY PHYSICAL LIMITATION IN LAST FOUR WEEKS*		
AGES 18-64	22	19
AGES 65 AND OVER	40	35
<b>SELF-REPORTED HEALTH STATUS</b>		
EXCELLENT HEALTH		
AGES 0-17	37	40
AGES 18-64	23	22
AGES 65 AND OVER	8	12
FAIR/POOR HEALTH		
AGES 0-17	6	8
AGES 18-64	15	14
AGES 65 AND OVER	33	28

\* Information not available for 0-17 year olds.

# technical appendix

## Technical Appendix. Data and Methods

The data used in this study are from the CHIS 2001 survey, which collected information from 55,428 households (55,428 adults, 5,801 adolescents ages 12-17, and 12,592 parents about a child in their home ages 0-11), drawn from every county in the state. The CHIS 2001 survey was conducted in six languages (English, Spanish, Chinese, Vietnamese, Korean, and Khmer) and was designed so that the results would be most inclusive of the State's ethnically diverse population. The goal of CHIS 2001 was to improve public health and access to health care. It provides statewide information for California's overall population as well as important information not previously available on major racial and ethnic populations, including local-level information for counties to conduct local planning.

CHIS sample sizes were carefully calculated in order to provide a representative sample of 41 smaller geographic strata (out of 58 California counties). Thirty-three of these areas are counties, while the remaining eight regions are groupings of counties with smaller population sizes. Because CHIS provides a representative sample for these 41 strata, the CHIS data provide better population-based information regarding the geographic variation of a number of health indicators for the State of California than previously available.

The 41 CHIS strata were collapsed into 15 geographic areas (12 metropolitan areas, 3 nonmetropolitan) for the purposes of this report (see Section 4, Exhibit 9). Each of the 15 geographic areas corresponds to a specific region in the California subsample of the National Health Interview Survey (NHIS), making cross-comparisons with our previous report for OPA using NHIS data possible. In this report, areas 13 through 15 include counties surveyed in CHIS 2001 but not sampled by NHIS in California.

Metropolitan areas are defined either as PMSAs or CMSAs, which refer to Primary Metropolitan Statistical Areas and Consolidated Metropolitan Statistical Areas, respectively. These commonly used metropolitan area definitions were developed by the U.S. Office of Management and Budget (OMB). Each of these types of Metropolitan Statistical Area (MSA) includes one or more counties. California contains some counties that cannot be classified as MSA regions and are considered to be nonurban areas by OMB. For purposes of this report, we have labeled these nonurban regions as *rural*. We have separated these nonurban regions into three geographic areas: Northern rural, Central rural, and Southern rural.

All data presented in this report are weighted to be representative of California's population and to account for the stratified sample design of CHIS 2001. CHIS oversampled small counties and rural areas, members of various Asian-American and Pacific Islander groups, and Native Americans and Alaska Natives. Data were weighted to the noninstitutionalized 2000 Census population.

HMO members were identified as all individuals with health insurance who responded positively to the primary managed care variable in each CHIS survey (i.e., questions AI21 in the adult survey, IA11 in the adolescent survey, and CF11 in the child survey).





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