# How Does the Adult Kaiser Permanente Membership in Northern California Compare with the Larger Community? 

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## Background

Kaiser Permanente is a nonprofit integrated group practice providing comprehensive health care to an ethnically diverse population of more than 3 million persons, about $30 \%$ of the population in 14 Northern California counties. Kaiser Permanente researchers are frequently asked to show how the Kaiser Permanente membership compares with the community at large in order for research reviewers to assess potential generalizability of results of studies conducted using Kaiser members. The only published study comparing the Northern California Kaiser membership with the community found Kaiser members are generally representative of the population of Northern California, with somewhat under-representation of the very poor. ${ }^{1}$ To provide more current information, we analyzed data from the 2003 California Health Interview Survey (CHIS 2003) for male and female survey respondents aged 20-79 residing in the zip codes covered by Kaiser Permanente's Northern California Region to compare respondents who identified themselves as Kaiser Permanente Health Plan members with two types of community populations:

- All adults not covered by Kaiser Permanente (including uninsured), and
- All adults with health insurance, excluding those who are only covered by Medicaid (Medi-Cal) and are not affiliated with another health plan for their care. The rationale for restricting the comparison populations to areas served by Kaiser Permanente is that other communities, especially those in more rural areas, generally differ from urban/suburban communities in their demographic characteristics and health care resources. Including these more rural communities would have made for an unfair comparison of Kaiser members to the general and insured populations.

Additionally, we compared the CHIS 2003 estimates for the Kaiser membership with estimates from the Kaiser Permanente Adult Member Health Survey conducted in 2002. The assumption was that if the demographic and health-related profile of Kaiser members derived from CHIS was similar enough to that derived from the MHS, other CHIS-based statistics could be used to describe the Kaiser membership when MHS data were not available.

## Methods

The California Health Interview Survey is a random-digit-dial telephone interview survey conducted biennially by the UCLA Center for Health Policy. ${ }^{2}$ The survey yields estimates for adults in California, using respondent data weighted to the age, gender, race/ethnic, and geographic distribution of the California population as derived from the 2000 Census. By special arrangement, Kaiser Permanente paid for a copy of the complete 2003 Adult California Health Interview Survey dataset that had been de-identified to protect respondent confidentiality and included variables to identify respondents residing in Northern California zip code areas served by Kaiser Permanente. ${ }^{3}$ Using information provided by questions about health insurance coverage during the previous year, the 20,350 CHIS2003 respondents aged 20-79 residing in Kaiser Permanente's Northern California Region were categorized as being a Kaiser member (per dataset variable ai22a_p, health plan name), Non-Kaiser member (including uninsured), and Non-Kaiser Insured member (someone with a named health plan other than Medi-Cal, including "Other" per variable ai22a_p, or who reported coverage through CHAMPUS, Indian Health Service, or Medicare in response to other questions). The Non-Kaiser Insured was a subset of the Non-Kaiser group. In addition to excluding people who reported having had no
health insurance during the year or who refused to answer the health insurance questions, it excluded people who only indicated having Medicaid/Medi-Cal coverage but no other named health plan (including Medicare) because this group is characterized by extremely low income and low educational attainment and is restricted by age (since most people qualify for Medicare at age 65).

The Kaiser Permanente Member Health Survey (MHS) is a large stratified random sample survey of adult health plan members aged 20 and over that has been conducted by the Kaiser Permanente Division of Research every 3 years beginning in 1993. The survey is conducted using a mailed questionnaire available only in English. Up to three mailings are used to enhance the survey response rate, which in 2002 was $47.3 \%$ after excluding ineligibles. The survey yields estimates for the Northern California Region membership and more defined member populations after being weighted to reflect the age, gender, and geographic (medical center service area) distribution of the membership at the time the survey sample was selected.

Broken down by study group, age and gender, the approximate numbers of CHIS 2003 and MHS 2002 respondents used for the comparisons were as follows:

|  | MHS 2002 |  | CHIS 2003 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kaiser | Kaiser | All Non-Kaiser | Non-Kaiser <br> Insured |  |
| Ages 20-79 |  |  |  |  |  |
| All | 17,520 |  | 4,430 | 15,790 | 12,350 |
| Women | 9,570 | 2,650 | 9,240 | 7,250 |  |
| Men | 7,950 | 1,780 | 6,550 | 5,090 |  |
| Ages 20-64 |  |  |  |  |  |
| All | 11,690 | 3,610 | 13,160 | 9,800 |  |
| Women | 6,620 | 2,140 | 7,620 | 5,680 |  |
| Men | 5,070 | 1,470 | 5,540 | 4,120 |  |
| Ages 65-79 |  |  |  |  |  |
| All | 5,830 | 800 | 2,620 | 2,540 |  |
| Women | 2,950 | 500 | 1,620 | 1,560 |  |
| Men | 2,880 | 300 | 1,000 | 970 |  |

Analyses were done using SAS version 9.1 procedures for analysis of data from complex survey samples. Analyses were done for all in the group and separately by gender. For analyses using CHIS 2003 data, the Proc Surveyfreq and Proc Surveymeans procedures were used to generate weighted proportions with standard errors and confidence intervals. Proc Surveylogistic regression models were used to assess whether Kaiser respondents significantly differed from comparison group respondents on likelihood of having selected characteristics after controlling for age and gender (age only for gender-based analyses) and after controlling for age ( 5 year intervals), gender, and race/ethnicity (indicator variables for AfricanAmerican/Black, Latino/Hispanic, Asian/Pacific Islander, Other), or age and race/ethnicity only for gender-based analyses. Proc Surveyreg was used to test whether difference in income as a continuous variable was statistically significant after controlling for age and gender (age only for gender-based analyses).

All analyses used respondent data weighted to the survey population. For CHIS 2003, respondents are weighted to the California population per the 2000 Census based on age, gender, race/ethnicity, and county of residence. For MHS 2002, respondents are weighted to the adult Kaiser Northern California Region membership based on the age, gender, and medical center service population from which they were sampled. Because the MHS2002 data used a different weighting scheme and stratum variable, the differences between MHS 2002 estimates
for Kaiser members and CHIS 2003 estimates for Kaiser members were examined by t-tests using sample Ns, means, and standard errors generated by Proc Surveymeans.

To enable direct comparisons of CHIS 2003 and MHS 2002 estimates for the adult Kaiser membership, item responses were grouped to make them comparable across surveys. In cases were variables had several categories, we examined differences in distribution of the groups regarding the extremes, i.e., income that was either very low $(<\$ 15,000)$ or very high $(>\$ 80,000)$, educational attainment that was very high (college graduate) or very low (did not complete high school), White nonHispanic race/ethnicity, and health that was either very good/excellent or just fair/poor.

## Results

Kaiser members comprised 22.5\% (CI: 21.6\%-23.3\%) of the Northern California Region population aged 20-79 and 28.3\% (CI: 27.3\%-29.2\%) of the Northern California Region insured population. Table 1 shows the percentages of these populations that are Kaiser members by gender and age group.

Kaiser members were compared to these two populations regarding age, race/ethnicity, household income, educational attainment, overall health status, history of diabetes and high blood pressure, current smoking status, and weight (overweight $\mathrm{BMI} \geq 25$ and obese $\mathrm{BMI} \geq 30$ ). Estimates of the age and gender distributions for Kaiser (based on MHS2002 and CHIS 2003) and the two non-Kaiser comparison populations (based on CHIS 2003 only) can be found in Table 2. Estimates of race/ethnicity, education, income, overall health status, current smoking, and weight (overweight and obese) for these populations for ages 20-79 can be found in Tables 3A (All), 3F (Females), and 3M (Males). (A set of Excel spreadsheets with prevalence estimates for these characteristics for men and women ages 20-79, 20-64, and 65-79 is attached as an Addendum). Tables 4A-4D report odds ratios (OR) with 95\% confidence intervals (CI) obtained from logistic regression models comparing the Kaiser with All Non-Kaiser and with Non-Kaiser insured populations after adjusting for age and gender, and Tables 4A-4D the results of logistic regression models that additionally control for race/ethnicity.
The Kaiser, all non-Kaiser (including uninsured and Medi-Cal), and non-Kaiser insured populations have a similar gender distribution. The Kaiser population has a similar age distribution to the non-Kaiser insured population, but has a significantly higher percentage of middle aged and older adults than the all non-Kaiser (including uninsured and Medi-Cal) population.

## Comparison of Kaiser Members with All Non-Kaiser Members (Including Uninsured)

Table 2 shows that the mean age for Kaiser members was significantly higher (by approximately two years) than that for all non-Kaiser members. The comparison of CHIS 2003 respondents aged 20-79 who were Kaiser members with all non-Kaiser adults, after adjusting for age and gender, can be found in Table 3A. It shows that the Kaiser men and women do not significantly differ from non-Kaiser adults with regards to percentage of White nonHispanics in the population subgroup. The Kaiser population has a significantly lower percentage of Latinos $\left(\mathrm{OR}_{\mathrm{ALL}}=0.72\right.$, CI: 0.63-0.84), but this is really only because of differences among the women ( $\mathrm{OR}_{\text {women }}=0.60$, $\mathrm{Cl}: 0.50-0.73)$. With regard to household income, Kaiser members are significantly less likely to be in a very low income $(<\$ 15,000)$ household $\left(\mathrm{OR}_{\text {ALL }}=0.29, \mathrm{Cl}: 0.24-0.36 ; \mathrm{OR}_{\text {MEN }}=0.21, \mathrm{Cl}\right.$ : $0.14-0.35 ; \mathrm{OR}_{\text {WOMEN }}=0.34, \mathrm{Cl}: 0.27-0.43$ ) and are more likely to be in the high income ( $>\$ 80,000$ ) category $\left(\mathrm{OR}_{\mathrm{ALL}}=1.33, \mathrm{CI}: 1.20-1.47\right)$, although this was more true for men ( $\mathrm{OR}_{\text {MEN }}=1.44, \mathrm{Cl}: 1.24-1.69$ ) than for women ( $\mathrm{OR}_{\text {WOMEN }}=1.22$, $\mathrm{Cl}: 1.06-1.41$ ). The mean household income was significantly higher for Kaiser women, but there was no significant difference among men. In terms of educational attainment, Kaiser members are significantly less likely to have a very low level of education $\left(\mathrm{OR}_{\text {ALL }}=0.42, \mathrm{Cl}: 0.34-0.51 ; \mathrm{OR}_{\text {MEN }}=0.50, \mathrm{CI}\right.$ :
$0.37-67$, $^{\text {OR }}$ Women $=0.34, \mathrm{CI}: 0.27-0.44$ ) and significantly more likely to be college graduates ( $\mathrm{OR}_{\mathrm{ALL}}=1.28, \mathrm{CI}: 1.16-1.41 ; \mathrm{OR}_{\mathrm{MEN}}=1.20, \mathrm{CI}: 1.03-1.39 ; \mathrm{OR}_{\text {WOMEN }}=1.37, \mathrm{CI}: 1.21-1.56$ ).

There are also significant differences between Kaiser and non-Kaiser adults in the health domain. Kaiser members are significantly more likely to perceive their health as very good or excellent ( $\mathrm{OR}_{\mathrm{ALL}}=1.34, \mathrm{Cl}: 1.21-1.48 ; \mathrm{OR}_{\mathrm{MEN}}=1.35, \mathrm{Cl}: 1.16-1.57 ; \mathrm{OR}_{\text {WOMEN }}=1.34, \mathrm{Cl}: 1.17-1.52$ ) and significantly less likely as fair or poor $\left(\mathrm{OR}_{\text {ALL }}=0.55, \mathrm{CI}: 0.48-0.64 ; \mathrm{OR}_{\mathrm{MEN}}=0.62, \mathrm{CI}\right.$ : $0.55-$ $0.84 ; \mathrm{OR}_{\text {WOMEN }}=0.50, \mathrm{Cl}: 0.42-0.60$ ). Differences in history of diabetes or high blood pressure were not significant. Kaiser members are significantly less likely to be current smokers ( $\mathrm{OR}_{\mathrm{ALL}}=0.71, \mathrm{Cl}: 0.61-0.821 ; \mathrm{OR}_{\text {MEN }}=0.67, \mathrm{Cl}: 0.54-0.83$; $\mathrm{OR}_{\text {WOMEN }}=0.72, \mathrm{Cl}: 0-60-0.87$ ). However, they are significantly more likely to be overweight ( $\mathrm{OR}_{\mathrm{ALL}}=1.19, \mathrm{Cl}: 1.07-1.32$; $\mathrm{OR}_{\text {MEN }}=1.24, \mathrm{Cl}: 1.04-1.46$; $\mathrm{OR}_{\text {WOMEN }}=1.16, \mathrm{Cl}: 1.02-1.32$ ), with no significant difference in likelihood of being obese ( $\mathrm{BMI} \geq 30$ ).

As Table 5A shows, making an additional adjustment for race/ethnicity does not substantively affect the magnitude of any of the differences between Kaiser members and non-Kaiser adults in the general population.

Tables 4C and 5C show that the comparisons restricted to ages 20-64 yield the same results as for the population aged 20-79.

## Comparison of Kaiser Members with All Non-Kaiser Insured

Table 2 shows that the mean ages of Kaiser members overall and of men were not significantly different from those of non-Kaiser members with health care coverage (excluding unaffiliated Medi-Cal recipients). Kaiser women in the CHIS 2003 sample were significantly older, but only by approximately one year. Tables 3A, 3F, and 3M and Table 4B shows the results of the comparisons of Kaiser members aged 20-79 with the population excluding the uninsured and Medi-Cal recipients unaffiliated with a health plan. After controlling for age and gender, Kaiser members are significantly less likely to be White nonHispanic than those covered by other insurance plans $\left(\mathrm{OR}_{\mathrm{ALL}}=0.74, \mathrm{Cl}: 0.66-0.82 ; \mathrm{OR}_{\text {MEN }}=0.68, \mathrm{Cl}: 0.58-0.80 ; \mathrm{OR}_{\text {WOMEN }}=0.80, \mathrm{Cl}\right.$ : 0.69-0.92), and among men, Kaiser members are significantly more likely to be Latino $\left(\mathrm{OR}_{\text {MEN }}=1.35, \mathrm{Cl}: 1.08-1.68\right)$. Kaiser members are significantly less likely to be in the very low income ( $<\$ 15,000$ ) category $\left(\mathrm{OR}_{\mathrm{ALL}}=0.61, \mathrm{Cl}: 0.49-0.76 ; \mathrm{OR}_{\text {MEN }}=0.46, \mathrm{Cl}: 0.29-0.71\right.$; $\mathrm{OR}_{\text {women }}=0.70$, $\mathrm{Cl}: 0.55-0.91$ ), but in contrast to the general population, there is no difference in the likelihood of being in the high income category ( $>\$ 80,000$ ) among men and only slight difference ( $\mathrm{OR}_{\text {Wомеn }}=0.84, \mathrm{Cl}: 0.73-0.97$ ) among women. The overall mean income of Kaiser members is significantly lower than the nonKaiser-insured, but the gender-based analyses shows this is only true among women. With regard to educational attainment, Kaiser men are less likely to be college graduates $\left(\mathrm{OR}_{\text {MEN }}=0.85, \mathrm{CI}: 0.73-0.99\right)$, with no significant difference in very low educational attainment, while Kaiser women are less likely to report very low educational attainment ( $\mathrm{OR}_{\text {women }}=0.65, \mathrm{Cl}: 0.50-0.85$ ), but do not significantly differ with regard to likelihood of completing college.

Kaiser members do not differ from the non-Kaiser insured with regard to rating of health as very good or excellent, but Kaiser women are less likely to rate their health as fair or poor ( $\mathrm{OR}_{\text {women }}=0.73, \mathrm{Cl}: 0.60-0.88$ ). The two groups do not differ with regards to diabetes or high blood pressure. There is no significant difference in current smoking or obesity, but Kaiser members are significantly more likely to be overweight $\left(\mathrm{OR}_{\mathrm{ALL}}=1.22, \mathrm{CI}: 1.10-1.35 ; \mathrm{OR}_{\text {MEN }}=1.20\right.$, CI: 1.01-1.41; $\mathrm{OR}_{\text {Women }}=1.24, \mathrm{Cl}: 1.09-1.41$ ).

Adjusting for race/ethnicity as well as age and education (see Table 5B) does not change these results, with the exception that the difference between Kaiser and non-Kaiser insured men regarding college graduation loses statistical significance.

Restricting the population to ages 20-64 (see Table 4D), we find that Kaiser members are less likely to be White nonHispanic. Kaiser men are less likely to be very low ( $<\$ 15,000$ ) income $\left(\mathrm{OR}_{\text {MEN }}=0.56, \mathrm{CI}: 0.33-0.96\right.$ ) with no significant difference in likelihood of being high income, while Kaiser women are less likely to be high ( $>\$ 80,000$ ) income ( $\mathrm{OR}_{\text {women }}=0.79, \mathrm{Cl}: 0.68-0.92$ ) with no significant difference in very low income. Kaiser men are less likely to be college graduates ( $\mathrm{OR}_{\text {MEN }}=0.81, \mathrm{Cl}: 0.69-0.95$ ) and there is no difference in very low educational attainment for either men or women. There is no significant difference with regard to health status (very good or fair/poor) nor smoking, but Kaiser women are significantly more likely to be overweight ( $\mathrm{OR}_{\text {women }}=1.24, \mathrm{Cl}: 1.08-1.44$ ). After doing the additional adjustment for race/ethnicity (see Table 4D), the only change is that Kaiser women now are significantly less likely to report fair or poor health, whereas this was borderline significant without the adjustment.

## Comparison of CHIS 2003 and MHS 2002 Estimates for Kaiser Members Aged 20-79 and 20-64

Comparisons of CHIS 2003 and MHS 2002 estimates for the Kaiser membership could be done only by testing for differences between proportions using t-tests, standard errors, and sample Ns produced by Proc Surveymeans. Where there are differences, it is difficult to determine which estimate might be more correct for the population. The CHIS has the advantage of being a phone interview and therefore might be capturing information on more members with lower levels of education, as well as members who do not speak English. However, the MHS data are weighted to the age, gender, and geographic composition of the membership, whereas the CHIS data are weighted to the composition of California state residents. The main differences between the estimates for Kaiser members regard estimates for race/ethnicity, education, and weight. Compared to CHIS estimates, the MHS 2002-based estimates are significantly higher regarding White nonHispanics (especially among men), lower regarding Latino/Hispanics (especially among men), and lower regarding very low education and stopping at the point of high school graduation or equivalent (among both men and women) (see Tables 3A, 3F, 3M). The MHS estimates of obesity are also significantly higher for Kaiser members (especially women) than estimates based on CHIS.

## Conclusions

Based on data from the 2003 California Health Interview Survey, the Kaiser Permanente adult membership is very similar to the non-Kaiser population with a health insurance plan other than just Medicaid with regards to education and health, differing by having lower percentages of White nonHispanics and lower percentages of members with very low and very high household incomes. The Kaiser Permanente membership is similar to the general population (including uninsured and Medicaid/Medi-Cal) with regards to race/ethnicity, but appears to be better educated, in better overall health (as perceived by survey participants), and have lower rates of smoking.

This report should be cited as:
Gordon NP. How Does the Adult Kaiser Permanente Membership in Northern California Compare with the Larger Community? Oakland, CA: Kaiser Permanente Division of Research; 2006 June. Available from: http://www.dor.kaiser.org/dor/mhsnet/public/kpnc_community.htm

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Table 1. Percentages of the Total and Insured Adult Populations Aged 20-79 Residing in Kaiser Permanente's Northern California Region That Are Kaiser Members

|  | \% of All Adults <br> (incl. Uninsured and <br> Medi-Cal) |  | \% of All Insured <br> (excl. Medi-Cal)* |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\%$ | CI | \% | CI |
| All | 22.5 | $21.6-23.3$ | 28.3 | $27.3-29.2$ |
| $20-64 \mathrm{yr}$ | 22.2 | $21.3-23.1$ | 28.8 | $27.7-29.9$ |
| $65-79 \mathrm{yr}$ | 24.2 | $22.2-26.3$ | 25.2 | $23.1-27.3$ |
|  |  |  |  |  |
| All Females | 23.2 | $22.1-24.3$ | 28.8 | $27.6-30.1$ |
| $20-64 \mathrm{yr}$ | 23.0 | $21.8-24.1$ | 29.4 | $27.9-30.8$ |
| $65-79 \mathrm{yr}$ | 24.8 | $22.1-27.5$ | 26.1 | $23.3-28.9$ |
|  |  |  |  |  |
| All Males | 21.7 | $20.4-22.9$ | 27.6 | $26.2-29.1$ |
| $20-64 \mathrm{yr}$ | 21.5 | $20.1-22.8$ | 28.1 | $26.5-29.8$ |
| $65-79 \mathrm{yr}$ | 23.5 | $20.4-26.6$ | 24.1 | $20.9-27.3$ |

${ }^{1}$ Based on 2003 California Health Interview Survey

Table 2. Age and Gender Distribution of Kaiser and non-Kaiser Adults Aged 20-79 Residing in Kaiser Permanente's Northern California Region

|  | Kaiser (based on MHS 2002) |  | Kaiser (based on CHIS 2003) |  | All Non-Kaiser (incl. Uninsured and Medi-Cal)* |  | All Non-Kaiser Insured (excl. Medi-Cal)* |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | s.e. | \% | s.e. | \% | s.e. | \% | s.e. |
| Gender |  |  |  |  |  |  |  |  |
| Female | 51.9 | 0.5 | 52.5 | 1.1 | 50.3 | 0.6 | 51.0 | 0.6 |
| Male | 48.1 | 0.5 | 47.5 | 1.1 | 49.7 | 0.6 | 49.0 | 0.6 |
| Age, All F+M |  |  |  |  |  |  |  |  |
| 20-34 yr | 28.0 | 0.4 | 24.0 | 1.0 | 32.3 | 0.6 | 26.3 | 0.6 |
| 35-49 yr | 33.4 | 0.4 | 34.9 | 1.0 | 33.9 | 0.5 | 34.7 | 0.6 |
| 50-64 yr | 25.2 | 0.4 | 28.2 | 0.9 | 22.2 | 0.4 | 23.9 | 0.5 |
| $65-79 \mathrm{yr}$ | 13.3 | 0.2 | 12.9 | 0.7 | 11.6 | 0.3 | 15.0 | 0.4 |
| Mean age | 45.5 | 0.1 | 46.5 | 0.3 | 43.7* | 0.2 | 46.1 | 0.2 |
| Age, All Females |  |  |  |  |  |  |  |  |
| 20-34 yr | 27.8 | 0.6 | 22.5 | 1.2 | 30.7 | 0.7 | 26.0 | 0.8 |
| 35-49 yr | 32.8 | 0.6 | 34.4 | 1.3 | 34.0 | 0.7 | 34.6 | 0.8 |
| 50-64 yr | 25.4 | 0.5 | 29.1 | 1.2 | 22.4 | 0.6 | 23.3 | 0.7 |
| 65-79 yr | 13.9 | 0.3 | 14.0 | 0.8 | 12.9 | 0.5 | 16.1 | 0.6 |
| Mean age | 45.7* | 0.2 | 47.2 | 0.4 | 44.4* | 0.2 | 46.3* | 0.3 |
| Age, All Males |  |  |  |  |  |  |  |  |
| $20-34 \mathrm{yr}$ | 28.2 | 0.7 | 25.7 | 1.7 | 33.8 | 0.9 | 26.7 | 0.9 |
| 35-49 yr | 34.0 | 0.7 | 35.4 | 1.6 | 33.8 | 0.8 | 34.9 | 0.9 |
| 50-64 yr | 25.0 | 0.5 | 27.3 | 1.4 | 21.9 | 0.6 | 24.5 | 0.8 |
| 65-79 yr | 12.7 | 0.3 | 11.6 | 0.9 | 10.4 | 0.5 | 13.9 | 0.6 |
| Mean age | 45.2 | 0.2 | 45.6 | 0.5 | 43.1* | 0.3 | 45.8 | 0.3 |

NOTES: MHS 2002 = Kaiser Permanente 2002 Member Health Survey; CHIS 2003 = 2003 California
Health Interview Survey
${ }^{1}$ Based on 2003 California Health Interview Survey

* Significantly differs from Kaiser (based on CHIS 2003).

Table 3A. Characteristics of Kaiser and non-Kaiser Adults Aged 20-79 Residing in Kaiser Permanente's Northern California Region

|  | Kaiser (based on MHS 2002) |  | Kaiser (based on CHIS 2003) |  | All Non-Kaiser (incl. Uninsured and Medi-Cal) |  | All Non-Kaiser Insured (excl. Medi-Cal) ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | s.e. | \% | s.e. | \% | s.e. | \% | s.e. |
| Race-Ethnicity |  |  |  |  |  |  |  |  |
| White nonHispanic | 63.9 | 0.4 | 56.8 | 1.1 | 55.2 | 0.6 | 66.2* | 0.7 |
| Afr.-Amer./Black | 6.1 | 0.2 | 7.7 | 0.5 | 5.1 | 0.3 | 4.1 | 0.3 |
| Latino/Hispanic | 11.2 | 0.3 | 16.7 | 0.9 | 23.2* | 0.5 | 13.9 | 0.5 |
| Asian/Pac Islander | 16.4 | 0.4 | 16.9 | 0.9 | 14.2 | 0.5 | 13.9 | 0.5 |
| Other | 2.4 | 0.1 | 1.8 | 0.3 | 2.3 | 0.2 | 1.9 | 0.2 |
| Income |  |  |  |  |  |  |  |  |
| <\$15,000 | 5.5 | 0.2 | 5.0 | 0.5 | 15.2* | 0.5 | 5.6* | 0.3 |
| \$15,001-\$25,000 | 8.5 | 0.2 | 10.0 | 0.7 | 15.7 | 0.4 | 9.7 | 0.4 |
| \$25,001-\$35,000 | 10.9 | 0.3 | 9.8 | 0.6 | 9.9 | 0.3 | 8.6 | 0.4 |
| \$35,001-\$65,000 | 30.6 | 0.4 | 28.5 | 1.0 | 22.6 | 0.5 | 26.1 | 0.5 |
| \$65,001-\$80,000 | 13.6 | 0.3 | 13.7 | 0.7 | 9.4 | 0.3 | 12.5 | 0.4 |
| >\$80,000 | 30.8 | 0.4 | 33.0 | 1.0 | 27.2* | 0.5 | 37.4* | 0.6 |
| Mean income | - | - | \$72,922 | \$1,073 | \$63,687* | \$656 | \$79,816* | \$784 |
| Education |  |  |  |  |  |  |  |  |
| < HS Grad | 4.8 | 0.2 | 9.0 | 0.8 | 19.1* | 0.5 | 9.4* | 0.5 |
| HS Grad | 14.7 | 0.3 | 22.2 | 0.9 | 21.8 | 0.5 | 19.4 | 0.5 |
| Some Post-HS | 39.9 | 0.4 | 28.0 | 0.9 | 24.3 | 0.5 | 25.9 | 0.5 |
| 4 Yr College Grad | 40.5 | 0.4 | 40.8 | 1.0 | 34.8* | 0.5 | 45.3 | 0.6 |
| Health Status |  |  |  |  |  |  |  |  |
| Very Good/Excl | 55.9 | 0.4 | 59.6 | 1.1 | 53.6* | 0.6 | 62.1 | 0.6 |
| Fair or Poor | 10.2 | 0.2 | 13.0 | 0.7 | 20.1* | 0.5 | 13.1 | 0.5 |
| Hx Diabetes (age 40+) | 9.2 | 0.3 | 8.8 | 0.7 | 9.8 | 0.4 | 7.8 | 0.4 |
| Hx High BP (age 40+) | 30.8 | 0.4 | 32.3 | 1.1 | 32.8 | 0.6 | 31.6 | 0.7 |
| Hx Asthma | 11.1 | 0.3 | 15.3 | 0.3 | 12.9 | 0.4 | 13.4 | 0.4 |
| Current Smoker | 12.5 | 0.3 | 12.9 | 0.7 | 17.9* | 0.5 | 14.0 | 0.5 |
| Weight |  |  |  |  |  |  |  |  |
| Overweight (BMI 25+) | 57.4 | 0.5 | 58.9 | 1.0 | 55.2* | 0.6 | 54.1* | 0.6 |
| Obese (BMI 30+) | 23.0 | 0.4 | 20.8 | 0.9 | 21.2 | 0.5 | 19.0 | 0.5 |
| Very Obese(BMI 35+) | 8.3 | 0.2 | 6.9 | 0.5 | 6.4 | 0.3 | 5.2 | 0.3 |

NOTES: MHS $2002=$ Kaiser Permanente 2002 Member Health Survey; CHIS 2003 = 2003 California Health Interview Survey
${ }^{1}$ Based on 2003 California Health Interview Survey

* Significantly differs from Kaiser (based on CHIS 2003) after controlling for age and gender.

Table 3F. Characteristics of Kaiser and non-Kaiser Female Adults Aged 20-79 Residing in Kaiser Permanente's Northern California Region

|  | Kaiser <br> (based on <br> MHS 2002) | Kaiser <br> (based on <br> CHIS 2003) | All Non-Kaiser <br> (incl. Uninsured <br> and Medi-Cal) ${ }^{1}$ | All Non-Kaiser <br> Insured (excl. <br> Medi-Cal) ${ }^{1}$ |
| :--- | :---: | :---: | :---: | :---: |

Race/Ethnicity

| White nonHispanic | 63.6 |
| :--- | :---: |
| Afr.-Amer./Black | 6.7 |
| Latino/Hispanic | 11.8 |
| Asian/Pac Islander | 10.1 |
| Other | 1.8 |
| Income |  |


| $<\$ 15,000$ | 6.6 |
| :--- | :---: |
| $\$ 15,000-\$ 25,000$ | 9.0 |
| $\$ 25,000-\$ 35,000$ | 11.5 |
| $\$ 35,000-\$ 60,000$ | 31.5 |
| $\$ 65,000-\$ 80,000$ | 12.3 |
| $>\$ 80,000$ | 29.0 |
| Mean income | - |


| Education |  |
| :--- | :--- |
| < HS Grad | 4.1 |


| HS Grad | 15.0 | 0.4 | 22.7 | 1.1 | 21.9 | 0.6 | 20.3 | 0.7 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Some Post-HS | 41.7 | 0.6 | 29.6 | 1.3 | 26.1 | 0.6 | 27.8 | 0.7 |
| 4 Yr College Grad | 39.2 | 0.6 | 40.0 | 1.4 | $33.2^{\star}$ | 0.7 | 42.9 | 0.8 |
| Overall Health |  |  |  |  |  |  |  |  |
| Very Good/Excl | 54.5 | 0.6 | 58.7 | 1.4 | $52.8^{\star}$ | 0.7 | 61.7 | 0.8 |
| Fair or Poor | 11.3 | 0.3 | 13.0 | 0.9 | $21.5^{\star}$ | 0.7 | $14.3^{\star}$ | 0.6 |
| Hx Diabetes (age 40+) | 7.6 | 0.3 | 7.0 | 0.7 | 9.0 | 0.6 | 6.7 | 0.5 |
| Hx High BP (age 40+) | 30.0 | 0.6 | 32.0 | 1.5 | 32.5 | 0.8 | 31.0 | 0.9 |
| Current Smoker | 10.8 | 0.4 | 11.1 | 0.8 | $14.4^{\star}$ | 0.5 | 11.9 | 0.5 |
| Weight |  |  |  |  |  |  |  |  |
| Overweight (BMI 25+) | 49.5 | 0.6 | 49.8 | 1.4 | 46.2 | 0.7 | $43.1^{*}$ | 0.8 |
| Obese (BMI 30+) | 23.7 | 0.5 | 19.5 | 1.0 | 20.2 | 0.6 | 17.2 | 0.6 |
| Very Obese(BMI 35+) | 10.1 | 0.4 | 7.4 | 0.7 | 7.3 | 0.7 | 5.7 | 0.4 |

[^0]* Significantly differs from Kaiser based on CHIS 2003 data after controlling for age.

Table 3M. Characteristics of Kaiser and non-Kaiser Male Adults Aged 20-79 Residing in Kaiser Permanente's Northern California Region

|  | Kaiser (based on MHS 2002) |  | Kaiser (based on CHIS 2003) |  | All Non-Kaiser (incl. Uninsured and Medi-Cal) |  | All Non-Kaiser Insured (excl. Medi-Cal) ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \% | s.e. | \% | s.e. | \% | s.e. | \% | s.e. |
| Race/Ethnicity |  |  |  |  |  |  |  |  |
| White nonHispanic | 64.3 | 0.7 | 54.9 | 1.7 | 55.1 | 0.9 | 65.7* | 1.0 |
| Afr.-Amer./Black | 5.3 | 0.3 | 6.9 | 0.8 | 5.0 | 0.4 | 4.1 | 0.4 |
| Latino/Hispanic | 10.6 | 0.5 | 20.0 | 1.5 | 24.2 | 0.8 | 14.8* | 0.7 |
| Asian/Pac Islander | 16.8 | 0.6 | 16.3 | 1.4 | 13.4 | 0.7 | 13.6 | 0.8 |
| Other | 3.0 | 0.2 | 1.9 | 0.4 | 2.2 | 0.2 | 1.8 | 0.2 |
| Income |  |  |  |  |  |  |  |  |
| <\$15,000 | 4.4 | 0.3 | 3.0 | 0.6 | 12.8* | 0.7 | 4.3* | 0.4 |
| \$15,000-\$25,000 | 8.0 | 0.4 | 8.6 | 1.1 | 15.5 | 0.7 | 9.1 | 0.6 |
| \$25,000-\$35,000 | 10.2 | 0.4 | 9.5 | 1.0 | 9.9 | 0.5 | 8.4 | 0.5 |
| \$35,000-\$60,000 | 29.7 | 0.7 | 28.4 | 1.5 | 23.1 | 0.7 | 26.1 | 0.9 |
| \$65,000-\$80,000 | 15.0 | 0.5 | 13.1 | 1.1 | 9.5 | 0.5 | 12.6 | 0.6 |
| >\$80,000 | 32.7 | 0.7 | 37.4 | 1.6 | 29.0* | 0.8 | 39.5 | 0.9 |
| Mean income | - | - | \$78,989 | \$1,734 | \$66,725* | \$1,012 | \$83,034 | \$1,209 |
| Education |  |  |  |  |  |  |  |  |
| < HS Grad | 5.6 | 0.3 | 10.5 | 1.3 | 19.3* | 0.8 | 9.9 | 0.7 |
| HS Grad | 14.5 | 0.5 | 21.6 | 1.4 | 21.7 | 0.7 | 18.4 | 0.7 |
| Some Post-HS | 38.0 | 0.7 | 26.3 | 1.4 | 22.5 | 0.7 | 24.0 | 0.8 |
| 4 Yr College Grad | 41.9 | 0.7 | 41.6 | 1.6 | 36.5* | 0.8 | 47.8* | 0.9 |
| Overall Health |  |  |  |  |  |  |  |  |
| Very Good/Excl | 57.3 | 0.7 | 60.6 | 1.6 | 54.3* | 0.9 | 62.4 | 1.0 |
| Fair or Poor | 9.1 | 0.3 | 13.0 | 1.2 | 18.6* | 0.7 | 11.9 | 0.6 |
| Hx Diabetes (age 40+) | 7.6 | 0.3 | 10.9 | 1.2 | 10.7 | 0.7 | 8.9 | 0.6 |
| Hx High BP (age 40+) | 31.5 | 0.7 | 32.6 | 1.8 | 33.1 | 1.0 | 32.2 | 1.1 |
| Current Smoker | 14.3 | 0.5 | 14.9 | 1.2 | 21.3* | 0.8 | 16.1 | 0.8 |
| Weight |  |  |  |  |  |  |  |  |
| Overweight (BMI 25+) | 65.7 | 0.7 | 69.0 | 1.6 | 64.4* | 0.8 | 65.4* | 0.9 |
| Obese (BMI 30+) | 22.2 | 0.6 | 22.2 | 1.4 | 22.2 | 0.7 | 20.9 | 0.8 |
| Very Obese(BMI 35+) | 6.4 | 0.4 | 6.4 | 0.9 | 5.5 | 0.4 | 4.6 | 0.4 |

NOTES: MHS 2002 = Kaiser Permanente 2002 Member Health Survey; CHIS 2003 = 2003 California
Health Interview Survey
${ }^{1}$ Based on 2003 California Health Interview Survey

* Significantly differs from Kaiser based on CHIS 2003 data after controlling for age.

Table 4A. Comparison of Kaiser to Non-Kaiser (Incl. Medi-Cal and Uninsured) Adults Aged 20-79 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age and Gender

| Factor | All 20-79 | Men 20-79 | Women 20-79 | COMMENTS about KP vs. All nonKP (including Medi-Cal and uninsured) |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}$ (CI) | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}$ (CI) |  |
| White nonHispanic | 0.99 (0.89-1.10) ns | 0.91 (0.77-1.06) ns | 1.08 (0.94-1.23) ns | No signif diff WhiteNH |
| Income < \$15,000 | 0.29 (0.24-0.36) *** | 0.21 (0.14-0.35) *** | 0.34 (0.27-0.43) *** | KP signif less likely very low income |
| Income > \$80,000 | 1.33 (1.20-1.47) *** | 1.44 (1.24-1.69) *** | 1.22 (1.06-1.41) ** | KP signif more likely very high income |
| College Graduate | 1.28 (1.16-1.41) *** | 1.20 (1.03-1.39) * | 1.37 (1.21-1.56) *** | KP women signif more likely college graduate |
| Didn't complete High School | 0.42 (0.34-0.51) *** | 0.50 (0.37-0.67) *** | 0.34 (0.27-0.44) *** | KP signif less likely to be very low education |
| Very Good/Excl Health | 1.34 (121-1.48) *** | 1.35 (1.16-1.57) *** | 1.34 (1.17-1.52) *** | KP signif more likely very good/excellent health |
| Fair or Poor Health | 0.55 (0.48-0.64) *** | 0.62 (0.55-0.84) *** | 0.50 (0.42-0.60) *** | KP signif less likely fair/poor health |
| Current Smoker | 0.72 (0.62-0.83) *** | 0.68 (0.55-0.84) *** | 0.76 (0.63-0.82) ** | KP signif less likely to be smoker |
| Overweight (BMI 25+) | 1.14 (1.03-1.26) * | 1.18 (1.00-1.39) * | 1.10 (0.97-1.25) ns | KP men slightly more likely overweight |
| Obese (BMI 30+) | 1.00 (0.89-1.13) ns | 1.02 (0.85-1.23) ns | 0.98 (0.84-1.13) ns | No signif diff obesity |

Table 4B. Comparison of Kaiser to Non-Kaiser Insured (Excl. Medi-Cal) Adults Aged 20-79 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age and Gender

| Factor compared | All 20-79 | Men 20-79 | Women 20-79 | COMMENTS re: KP vs. Other Insured |
| :--- | :--- | :--- | :--- | :--- |
| (excluding Medi-Cal) |  |  |  |  |

NOTES: Estimates based on CHIS2003 data weighted to the California adult population in 2000; Ns for Ages 20-79: All: Kaiser=4435, non-Kaiser=15,793; non-
Kaiser insured: 12,350; Men: Kaiser=1784, non-Kaiser=6553, non-Kaiser Insured=5090; Women: Kaiser=2651, Non-Kaiser=9240, non-Kaiser Insured=7254.
${ }^{1}$ Odds ratios and $95 \%$ confidence intervals after controlling for age and gender using SAS Proc SurveyLogistic ; non-Kaiser members are the reference group
${ }^{2}$ Odds ratios and 95\% confidence intervals after controlling for age using SAS Proc SurveyLogistic; non-Kaiser members are the reference group

* p <.05; ** $\mathrm{p}<.01$; *** $\mathrm{p}<.001$

Table 4C. Comparison of Kaiser to Non-Kaiser (Incl. Medi-Cal and Uninsured) Adults Aged 20-64 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age and Gender

| Factor | All 20-64 | Men 20-64 | Women 20-64 | COMMENTS about KP vs. All nonKP (including Medi-Cal and uninsured) |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}$ (CI) | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}$ (CI) |  |
| White nonHispanic | 0.93 (0.83-1.03) ns | 0.83 (0.69-0.98) * | 1.03 (0.89-1.20) ns | KP men slightly less likely WhiteNH |
| Income < \$15,000 | 0.28 (0.22-0.36) *** | 0.21 (0.13-0.35) *** | 0.33 (0.25-0.44) *** | KP signif less likely very low income |
| Income > \$80,000 | 1.31 (1.17-1.47) *** | 1.45 (1.22-1.71) *** | 1.20 (1.03-1.37) * | KP signif more likely very high income |
| College Graduate | 1.26 (1.13-1.40) *** | 1.19 (1.01-1.39) * | 1.34 (1.16-1.54) *** | KP women signif more likely college graduate |
| Didn't complete High School | 0.43 (0.35-0.54) *** | 0.50 (0.36-0.70) *** | 0.37 (0.28-0.49) *** | KP signif less likely to be very low education |
| Very Good/Excl Health | 1.32 (1.18-1.47) *** | 1.32 (1.12-1.56) ** | 1.31 (1.14-1.52) *** | KP signif more likely very good/excellent health |
| Fair or Poor Health | 0.55 (0.46-0.65) *** | 0.62 (0.47-0.81) *** | 0.50 (0.40-0.61) *** | KP signif less likely fair/poor health |
| Current Smoker | 0.71 (0.61-0.83) *** | 0.67 (0.53-0.84) *** | 0.77 (0.63-0.94) ** | KP signif less likely to be smoker |
| Overweight (BMI 25+) | 1.11 (0.99-1.24) ns | 1.14 (0.95-1.36) ns | 1.08 (0.94-1.24) ns | No signif diff overwt (M+F combined) |
| Obese (BMI 30+) | 1.00 (0.88-1.14) ns | 1.01 (0.83-1.23) ns | 0.99 (0.84-1.17) ns | No signif diff obesity |

Table 4D. Comparison of Kaiser to Non-Kaiser Insured (Excl. Medi-Cal) Adults Aged 20-64 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age and Gender

| Factor compared | All 20-64 | Men 20-64 | Women 20-64 | COMMENTS re: KP vs. Other Insured |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}$ (CI) | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}$ (CI) | (excluding Medi-Cal) |
| White nonHispanic | 0.67 (0.60-0.75) *** | 0.60 (0.51-0.72) *** | 0.74 (0.64-0.86) *** | KP signif less likely White nonHispanic |
| Income < \$15,000 | 0.79 (0.60-1.05) ns | 0.56 (0.33-0.96) * | 0.97 (0.70-1.34) ns | KP men signif less likely very low income |
| Income > \$80,000 | 0.87 (0.78-0.97) * | 0.97 (0.82-1.15) ns | 0.79 (0.68-0.92) ** | KP women signif less likely very high income |
| College Graduate | 0.86 (0.77-0.96) ** | 0.81 (0.69-0.95) * | 0.92 (0.80-1.06) ns | KP men less likely college graduate |
| Didn't complete High School | 0.94 (0.74-1.21) ns | 1.00 (0.70-1.43) ns | 0.87 (0.63-1.17) ns | No signif diff very low education |
| Very Good/Excl Health | 0.95 (0.85-1.06) ns | 0.96 (0.80-1.14) ns | 0.94 (0.80-1.09) ns | No signif diff very good/excellent health |
| Fair or Poor Health | 0.91 (0.76-1.09) ns | 1.06 (0.80-1.41) ns | 0.80 (0.64-1.00) ns | No signif diff fair/poor health |
| Current Smoker | 0.93 (0.79-1.09) ns | 0.88 (0.70-1.11) ns | 0.99 (0.80-1.21) ns | No signif diff smoking |
| Overweight (BMI 25+) | 1.20 (1.07-1.35) ** | 1.16 (0.96-1.39) ns | 1.24 (1.08-1.44) ** | KP women signif more likely overweight |
| Obese (BMI 30+) | 1.11 (0.97-1.28) ns | 1.05 (0.86-1.29) | 1.18 (0.99-1.41) ns | No signif diff obesity |

NOTES: Estimates based on CHIS2003 data weighted to the California adult population in 2000; Ns for Ages 20-64: All: Kaiser=3618, non-Kaiser=13,166, nonKaiser insured: 9808; Men: Kaiser=1475, non-Kaiser=5547, non-Kaiser Insured=4122; Women: Kaiser=2143, Non-Kaiser=7619, non-Kaiser Insured=5686.
${ }^{1}$ Odds ratios and 95\% confidence intervals after controlling for age and gender using SAS Proc SurveyLogistic ; non-Kaiser members are the reference group
${ }^{2}$ Odds ratios and 95\% confidence intervals after controlling for age using SAS Proc SurveyLogistic; non-Kaiser members are the reference group

* $p<.05$; ** $\mathrm{p}<.01$; *** $\mathrm{p}<.001$

Table 5A. Comparison of Kaiser to Non-Kaiser (including Medi-Cal and Uninsured) Adults Aged 20-79 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age, Gender, and Race-Ethnicity

| Factor | All 20-79 | Men 20-79 | Women 20-79 | COMMENTS about KP vs. All nonKP |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}(\mathrm{Cl})$ | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}(\mathrm{Cl})$ | (including Medi-Cal and uninsured) |
| White nonHispanic | 0.99 (0.89-1.10) ns | 0.91 (0.77-1.06) ns | 1.08 (0.94-1.23) ns | No signif diff White nonHispanic |
| Income < \$15,000 | 0.29 (0.14-0.36) *** | 0.21 (0.13-0.34) *** | 0.35 (0.27-0.44) *** | KP signif less likely very low income |
| Income > \$80,000 | 1.29 (1.16-1.44) *** | 1.45 (1.24-1.71) *** | 1.15 (1.00-1.33) * | KP men signif more likely very high income |
| College Graduate | 1.22 (1.11-1.35) *** | 1.17 (1.01-1.37) * | 1.28 (1.12-1.46) *** | KP women signif more likely college graduate |
| Didn't complete High School | 0.40 (0.32-0.50) *** | 0.46 (0.32-0.64) *** | 0.34 (0.26-0.44) *** | KP signif less likely to be very low education |
| Very Good/Excl Health | 1.32 (1.19-1.46) *** | 1.35 (1.15-1.59) *** | 1.28 (1.12-1.47) *** | KP signif more likely very good/excellent health |
| Fair or Poor Health | 0.55 (0.48-0.65) *** | 0.61 (0.49-0.78) *** | 0.51 (0.42-0.61) *** | KP signif less likely fair/poor health |
| Current Smoker | 0.71 (0.61-0.82) *** | 0.67 (0.54-0.83) *** | 0.72 (0.60-0.87) *** | KP signif less likely to be smoker |
| Overweight (BMI 25+) | 1.19 (1.07-1.32) ** | 1.24 (1.04-1.46) * | 1.16 (1.02-1.32) * | KP slightly more likely overwt ( $\mathrm{M}+\mathrm{F}$ combined) |
| Obese (BMI 30+) | 1.03 (0.91-1.16) ns | 1.04 (0.86-1.25) ns | 1.02 (0.87-1.18) ns | No signif diff obesity |

Table 5B. Comparing Kaiser to All Non-Kaiser Insured (Excluding Medi-Cal) Adults Aged 20-79 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age, Gender, and Race-Ethnicity

| Factor compared | All $20-79$ | Men 20-79 | Women 20-79 | COMMENTS re: KP vs. Other Insured |
| :--- | :--- | :--- | :--- | :--- |
| (excluding Medi-Cal) |  |  |  |  |

NOTES: Estimates based on CHIS2003 data weighted to the California adult population in 2000; Ns for Ages 20-79: All: Kaiser=4435, non-Kaiser=15,793; nonKaiser insured: 12,350; Men: Kaiser=1784, non-Kaiser=6553, non-Kaiser Insured=5090; Women: Kaiser=2651, Non-Kaiser=9240, non-Kaiser Insured=7254.
${ }^{1}$ Odds ratios and 95\% confidence intervals after controlling for age, gender, and race/ethnicity using SAS Proc Surveylogistic; ref group=non-Kaiser members
${ }^{2}$ Odds ratios and $95 \%$ confidence intervals after controlling for age and race/ethnicity using SAS Proc Surveylogistic; ref group=non-Kaiser members

* p<.05; ** p<.01; *** $p<.001$

Table 5C. Comparison of Kaiser to Non-Kaiser (Incl. Medi-Cal and Uninsured) Adults Aged 20-64 in Kaiser's Northern California Region, CHIS 2003, Adjusting for Age, Gender, and Race-Ethnicity

| Factor | All 20-64 | Men 20-64 | Women 20-64 | COMMENTS about KP vs. All nonKP |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}(\mathrm{Cl})$ | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}(\mathrm{Cl})$ | (including Medi-Cal and uninsured) |
| White nonHispanic | 0.93 (0.83-1.03) ns | 0.83 (0.69-0.98) * | 1.03 (0.79-1.20) ns | KP men slightly less likely WhiteNH |
| Income < \$15,000 | 0.28 (0.22-0.37) *** | 0.21 (0.12-0.34) *** | 0.34 (0.25-0.46) *** | KP signif less likely very low income |
| Income > \$80,000 | 1.29 (1.14-1.44) *** | 1.47 (1.23-1.75) *** | 1.14 (0.98-1.32) ns | KP men signif more likely very high income |
| College Graduate | 1.20 (1.07-1.34) ** | 1.17 (0.98-1.38) ns | 1.25 (1.08-1.44) ** | KP women signif more likely college graduate |
| Didn't complete High School | 0.42 (0.32-0.53) *** | 0.45 (0.31-0.66) ** | 0.37 (0.28-0.51) *** | KP signif less likely to be very low education |
| Very Good/Excl Health | 1.30 (1.16-1.46) *** | 1.34 (1.12-1.59) ** | 1.26 (1.09-1.47) ** | KP signif more likely very good/excellent health |
| Fair or Poor Health | 0.55 (0.46-0.66) *** | 0.61 (0.47-0.80) *** | 0.50 (0.40-0.62) *** | KP signif less likely fair/poor health |
| Current Smoker | 0.71 (0.61-0.83) *** | 0.66 (0.53-0.83) *** | 0.74 (0.60-0.90) ** | KP signif less likely to be smoker |
| Overweight (BMI 25+) | 1.17 (1.04-1.31) ** | 1.20 (1.00-1.44) ns | 1.15 (0.99-1.32) ns | KP slightly more likely overwt (M+F combined) |
| Obese (BMI 30+) | 1.03 (0.90-1.18) ns | 1.03 (0.84-1.26) ns | 1.04 (0.88-1.23) ns | No signif diff obesity |

Table 5D. Comparing Kaiser to Non-Kaiser Insured (Excl. Medi-Cal) Adults Aged 20-64 in Kaiser's Northern California Region, CHIS 2003,
Adjusting for Age, Gender, and Race-Ethnicity

| Factor compared | All 20-64 | Men 20-64 | Women 20-64 | COMMENTS re: KP vs. Other Insured |
| :---: | :---: | :---: | :---: | :---: |
|  | $\mathrm{OR}^{1}(\mathrm{Cl})$ | $\mathrm{OR}^{2}$ (CI) | $\mathrm{OR}^{2}$ (CI) | (excluding Medi-Cal) |
| White nonHispanic | 0.67 (0.60-0.75) *** | 0.60 (0.51-0.72) *** | 0.74 (0.64-0.86) *** | KP signif less likely White nonHispanic |
| Income < \$15,000 | 0.72 (0.59-0.96) * | 0.50 (0.29-0.88) * | 0.91 (0.65-1.27) ns | KP men signif less likely very low income |
| Income > \$80,000 | 0.92 (0.82-1.03) ns | 1.06 (0.89-1.26) ns | 0.81 (0.70-0.94) ** | KP women signif less likely very high income |
| College Graduate | 0.90 (0.80-1.00) ns | 0.82 (0.73-1.03) ns | 0.94 (0.81-1.08) ns | No signif diff college graduate |
| Didn't complete High School | 0.79 (0.61-1.03) ns | 0.81 (0.55-1.19) ns | 0.76 (0.54-1.06) ns | No signif diff very low education |
| Very Good/Excl Health | 1.02 (0.91-1.14) ns | 1.04 (0.87-1.24) ns | 0.99 (0.85-1.15) ns | No signif diff very good/excellent health |
| Fair or Poor Health | 0.83 (0.69-0.99) * | 0.98 (0.74-1.29) ns | 0.72 (0.57-0.91) ** | KP women signif less likely fair/poor health |
| Current Smoker | 0.94 (0.80-1.10) ns | 0.87 (0.69-1.09) ns | 1.00 (0.81-1.23) ns | No signif diff smoking |
| Overweight (BMI 25+) | 1.18 (1.05-1.33) ** | 1.14 (0.94-1.38) ns | 1.22 (1.05-1.41) ** | KP women signif more likely overweight |
| Obese (BMI 30+) | 1.08 (0.95-1.24) ns | 1.02 (0.83-1.26) ns | 1.16 (0.97-1.39) ns | No signif diff obesity |

NOTES: Estimates based on CHIS2003 data weighted to the California adult population in 2000; Ns for Ages 20-64: All: Kaiser=3618, non-Kaiser=13,166, nonKaiser insured: 9808; Men: Kaiser=1475, non-Kaiser=5547, non-Kaiser Insured=4122; Women: Kaiser=2143, Non-Kaiser=7619, non-Kaiser Insured=5686.
${ }^{1}$ Odds ratios and 95\% confidence intervals after controlling for age, gender, and race/ethnicity using SAS Proc Surveylogistic; ref group=non-Kaiser members
${ }^{2}$ Odds ratios and 95\% confidence intervals after controlling for age and race/ethnicity using SAS Proc Surveylogistic; ref group=non-Kaiser members

* $p<.05$; ** $p<.01$; *** $p<.001$


[^0]:    NOTES: MHS 2002 = Kaiser Permanente 2002 Member Health Survey; CHIS 2003 = 2003 California
    Health Interview Survey
    ${ }^{1}$ Based on 2003 California Health Interview Survey

