

A Comparison of Sociodemographic and Health Characteristics of the Kaiser Permanente Northern California Membership Derived from Two Data Sources: The 2008 Member Health Survey and the 2007 California Health Interview Survey

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Background

Kaiser Permanente Northern California is a large, integrated health care delivery system that provides care for a socially and ethnically diverse membership of over 3.2 million adults and children as of December 2011. Kaiser Permanente researchers are frequently asked to provide evidence about how the Kaiser Permanente adult membership compares with the community at large in order for research reviewers to assess the generalizability of study results conducted with Kaiser Permanente members. Previous studies have found that the Kaiser Permanente membership is generally representative of the broader community, primarily differing from the general population by having lower percentages of adults at the low and high income extremes.^{1,2} However, since an ever-increasing number of adults have no health insurance due to cost or difficulty obtaining coverage due to pre-existing conditions, the uninsured population has likely changed.

In a separate brief³, we reported on a comparison of Northern California Kaiser Permanente members aged 25-79 (including those enrolled in Kaiser Permanente through Medicare, Medi-Cal, and other government-sponsored programs) who were identified in the 2007 California Health Interview Survey (CHIS 2007) with three populations:

- Northern California adults not covered by Kaiser Permanente (including Medicaid and uninsured) aged 25-79,
- Northern California adults aged 25-79 with private or government health insurance, excluding those who are only covered by Medicaid (Medi-Cal), who are not covered by Kaiser Permanente
- All Northern California adults aged 25-79

This report compares CHIS 2007 estimates for the Kaiser Permanente membership with estimates from the Kaiser Permanente Member Health Survey (MHS) conducted in 2008. This comparison was made to provide evidence to support the generalizability of studies based on Kaiser Permanente MHS data to the Northern California general and insured populations.

Methods

The California Health Interview Survey is a random-digit-dial telephone interview survey conducted biennially by the UCLA Center for Health Policy.⁴ The survey, which is generally conducted June of the survey year through March of the following year, yields estimates for California adults 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 2007 Adult California Health Interview Survey dataset that had been de-identified to protect respondent confidentiality⁵. County of residence was used to identify respondents in the Northern California population. Using information provided by questions about health insurance coverage during the previous year, the 20,961 CHIS 2007 respondents aged 25-79 residing in Northern California were categorized as being a Kaiser Permanente (KP) member (per dataset variable ai22a_p or ah50_p, health plan name), Non-Kaiser Permanente (including uninsured), and Non-Kaiser Permanente Insured (someone with a named health plan other than solely 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 Permanente Insured (NKPI) was a subset of the Non-Kaiser Permanente group (NKP). 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). County of residence was used to identify respondents in the Northern California population.

The Kaiser Permanente Member Health Survey (KP-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 with optional online version and is available only in English. Up to three mailings are used to enhance the survey response rate, which in 2008 was 40.9% for ages 25-79 after excluding ineligible. 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.⁶

Broken down by study group, age and gender, the approximate numbers of CHIS 2007 and MHS 2008 respondents used for the comparisons were as follows:

	MHS 2008	CHIS 2007		
	Kaiser Permanente (KP-MHS)	Kaiser Permanente (KP-CHIS)	Non-Kaiser Permanente Insured (NKPI)	All Northern California Adults (NCAL)
Ages 25-79				
All	15,352	3,850	14,085	20,961
Women	8,559	2,550	8,342	12,484
Men	6,793	1,500	5,743	8,477
Ages 25-44				
All	4,316	889	3,416	5,681
Women	2,736	496	1,989	3,311
Men	1,580	393	1,427	2,370
Ages 45-64				
All	4,316	1,936	6,649	10,198
Women	2,940	1,202	3,919	6,068
Men	2,308	734	2,730	4,130
Ages 65-79				
All	5,788	1,025	4,020	5,082
Women	2,883	652	2,434	3,105
Men	2,905	373	1,586	1,977

All analyses used respondent data weighted to the survey population. For CHIS 2007, respondents are weighted to the California population per the 2000 Census based on age, gender, race/ethnicity, and county of residence. For MHS 2008, 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.

Analyses were performed using SAS version 9.1 procedures for analysis of data from complex survey samples. Proc Surveyfreq and Proc Surveymeans procedures were used to generate weighted proportions with standard errors and confidence intervals. If there was no overlap in confidence intervals, the differences between the two groups being compared were considered to be statistically significant with regard to that characteristic. Analyses were done for all in the group and separately by gender.

To enable direct comparisons of CHIS 2007 and MHS 2008 estimates for the adult Kaiser Permanente membership, CHIS item responses were converted to make them comparable across the two surveys. The CHIS race-ethnicity variable was re-constructed to match the way it was created for the MHS2008, giving priority to African-American over Hispanic/Latino. Specifically, respondents indicating African-American/Black race-ethnicity were classified as African-American; those who indicated being of Hispanic/Latino descent (but not also African-American/Black) were classified as Hispanic/Latino; as Asian or Pacific Islander descent but not Black of Hispanic/Latino, Asian/Pacific Islander; only White as White nonHispanic; and all others as Other. Continuous variables (such as income) were categorized to match MHS2008 categories. In cases where variables had several categories, we examined differences in distribution of the groups regarding the extremes, e.g., income that was either very low for Northern California (< \$25,000) or high (>\$100,000), educational attainment that was high (college graduate) or very low (did not complete high school).

Results

KP-MHS and KP-CHIS populations were compared to each other with regard to sociodemographic characteristics (age, race-ethnicity, household income, educational attainment, fulltime employment status, marital/relationship status) and health characteristics (overall health status, history of diabetes, high blood pressure, heart disease, and asthma, smoking status, obesity, and sedentary lifestyle) that were ascertained in both surveys. The KP-CHIS population was further compared to the Northern California adult population. Comparisons of characteristics for men and women combined are found in Tables 3A (sociodemographic) and 4A (health). Comparisons for men only are found in Tables 3M and 4M, and women in Tables 3W and 4W.

A. Comparison of Characteristics of the Northern California Kaiser Permanente Member Population Derived from the 2008 Member Health Survey (KP-MHS) and from CHIS 2007 (KP-CHIS).

Sociodemographic Characteristics (Tables 1, 2A, 2M, 2W):

- Age and Gender: The gender and age distributions of the KP-MHS and KP-CHIS populations are comparable, although the age distribution of the KP-CHIS population based on Census weighting is slightly older compared with the actual age distribution of the KP membership aged 25-79 in 2008.
- Race-Ethnicity: The KP-MHS estimate of the percentage of White nonHispanics in the population does not significantly differ from that derived from KP-CHIS. However, compared with the KP-CHIS population estimates, the KP-MHS estimated percentage of Hispanic/Latinos is significantly lower and percentage of Asian/Pacific Islanders is significantly higher.
- Income: The KP-MHS and KP-CHIS estimates regarding the categorical distribution of income are statistically comparable.
- Educational Attainment: The KP-MHS estimates for education suggest a slightly better educated population than the KP-CHIS estimates, with higher percentages of KP-MHS men and women having graduated from high school and obtained some formal education beyond high school. However, the estimates of the percentages of the population that has a college degree are comparable.
- Employment Status: The estimated percentages of women and men who are working at least 20 hrs/week do not significantly differ.

- Relationship Status: The estimated percentages of women and men who are married or part of an unmarried couple do not significantly differ.

Health Indicators (Tables 3A, 3M, 3W):

- Overall Health Status: The estimated percentages of women and men in good health are comparable.
- Chronic Conditions: The estimated percentages of women and men aged ≥ 40 with a history of diabetes (excluding gestational), high blood pressure, and heart disease are comparable. KP-MHS estimates for asthma among women aged 25-79 are significantly lower than those derived from CHIS, but this might be explained by the fact that the MHS estimates are based on asthma symptoms, treatment, or medication use in the past 12 months, while the CHIS estimates are based on ever being diagnosed with asthma.
- Behavioral Health Risks: The estimated prevalence of current smoking derived from CHIS is higher than that derived from the MHS, especially for men, but the estimates from both sources are not statistically significantly different. The KP-MHS estimated percentages of men and women who have a history of smoking are significantly lower than those estimated from CHIS, but this is likely due to a difference in who got into the numerator. When people who smoked at all, just not daily for at least a year were made the denominator, the MHS estimates of ever smoking more than doubled. The estimates of prevalence of obesity and sedentary lifestyle (no regular exercise in the past week) are comparable.

B. Comparison of Characteristics of the Northern California Kaiser Permanente Member Population (KP-MHS) with the Insured Non-Kaiser Permanente covered Adult Population that excludes people who only have Medi-Cal coverage (NKPI)

Sociodemographic Characteristics (see Tables 1, 2A, 2M, 2W)

- Age and Gender: The KP-MHS population mean age is significantly younger than the NKPI population, but otherwise did not significantly differ with regard to gender and age distribution.
- Race-Ethnicity: The KP-MHS population estimates show comparable percentages of nonHispanic Whites, but a significantly lower percentage of Latinos (both men and women) than the NKPI population. Among women only, the KP population has a significantly higher percentage of African-Americans and among men, a significantly higher percentage of Asian/Pis, than the NKPI population.
- Income: The KP-MHS population had a significantly lower percentage of people with household incomes $\leq \$25,000$ than the NKP population, but did not significantly differ in percentage with incomes $> \$100,000$.
- Educational Attainment: The KP-MHS population estimates suggest that KP members are more likely to be high school graduates and have post-secondary education than the NKPI population, but the groups did not significantly differ with regard to percentage college graduates.
- Employment Status: Overall the KP-MHS population was more likely than the NKPI population to be employed at least 20 hours/week, but this was due to differences among women, not men.
- Relationship Status: KP and NKPI men and women were similar with regard to being in a committed relationship.

Health Characteristics (see Tables 3A, 3M, 3W)

- Overall Health Status: The percentage the KP-MHS population (all ages and ages 40+) in good health was significantly higher than those for the NKPI population, but further analyses showed that the significant difference was only found for men.
- Chronic Conditions: Overall, the KP-MHS population had lower percentages of adults with a history of heart disease among ages 40+ and higher percentages with asthma, but this was mainly due to differences among women.

- **Behavioral Health Risks:** Overall, the KP-MHS population had lower percentages of adults who were current smokers and higher percentages that were obese and sedentary. However, these differences were mostly due to significant differences among women.

C. Comparison of Characteristics of the Northern California Kaiser Permanente Member Population (KP-MHS) with the Adult Population of Northern California (Including Those Covered by Kaiser Permanente)

Sociodemographic Characteristics (see Tables 1, 2A, 2M, 2W)

- **Age and Gender:** The KP-MHS population did not significantly differ from the NCAL population with regard to mean age or age and gender distribution.
- **Race-Ethnicity:** The KP-MHS population had a significantly higher percentage of nonHispanic Whites, African-Americans, and Asian/PIs and significantly lower percentages of Latinos than the NCAL population. By gender, the higher percentage of African-Americans was only among women and the higher percentage of Asian/PIs only among men.
- **Income:** Compared to the NCAL population, KP-MHS had a significantly lower percentage of adults (both men and women) with household incomes of \leq \$25,000 and a significantly higher percentage with incomes $>$ \$100,000.
- **Educational Attainment:** The KP-MHS population was better educated than the NCAL population, with higher percentages of high school graduates, some college, and college graduates.
- **Employment Status:** The KP-MHS population had significantly higher percentages of people who were employed at least 20 hours/week than the NCAL population, but age-specific analyses showed that the difference was only significant among women.
- **Relationship Status:** KP-MHS and NCAL populations were similar with regard to percentages of men and women in a committed relationship.

Health Characteristics (see Tables 3A, 3M, 3W)

- **Overall Health Status:** Significantly higher percentages of KP-MHS men and women considered themselves to be in good health as compared with the NCAL population, but the actual difference was less than 10 percentage points.
- **Chronic Conditions:** The KP-MHS population had lower percentages of adults with a history of heart disease (ages 40+) and asthma than the NCAL population, but these differences were primarily due to significant differences among women. NCAL men and women aged \geq 40 did not significantly differ with regard to history of diabetes or high blood pressure.
- **Behavioral Health Risks:** The KP-MHS population had a significantly lower percentage of current smokers (both men and women) than the NCAL population. However, significantly higher percentages of KP-MHS women were obese and sedentary.

Conclusions

A comparison of sociodemographic and health characteristics of the Kaiser Permanente Northern California member population ages 25-79 based on the 2008 Kaiser Permanente Member Health Survey (KP-MHS) and 2007 California Health Interview Survey (KP-CHIS) found more comparability than significant differences in estimates. KP-CHIS estimated a higher percentage of Hispanic/Latinos and lower percentage of Asian/Pacific Islanders, and this difference may be due to CHIS being conducted in both English and Spanish and the MHS only in English. The estimates from the two sources of distribution of household income, employment status, college graduates, and relationship status are comparable, although the distribution of educational attainment skews higher based on KP-MHS. The two sources provide comparable estimates for percentages of the population in good health (ages 25-79 and age \geq 40) and history of diabetes and high blood pressure, only differing with regard to history of heart disease and asthma among women. Smoking

and obesity prevalence estimates are also comparable. KP-MHS estimates of sedentary lifestyle are higher although because this risk factor was assessed using non-comparable questions, we can't be sure whether this is an artifact of ascertainment or actual difference. Overall, using CHIS to estimate characteristics of the Northern California Region membership worked fairly well, although the numbers of respondents would be too low to provide estimates at the county or medical center service area population level as is possible with the MHS.

The comparison of the KP-MHS population with Northern California adults with health insurance other than Medi-Cal coverage (NKPI) found that the KP-MHS population has significantly lower percentages of adults with incomes \leq \$25,000 but no difference in percentage at the higher end ($>$ \$100,000). Overall educational attainment is higher in the KP-MHS population than in the NKPI population, but the percentage of college graduates is not significantly different. The KP-MHS population has a significantly higher percentage of adults working at least 20 hours/week, but this is true only for women. With regards to health characteristics, while the KP-MHS population has a higher percentage of adults in good health, but this was only true among men. The populations did not differ with regard to current smoking, but the KP-MHS population had a higher percentage of obese and sedentary adults

The KP-MHS member population differs somewhat more from the Northern California adult population (NCAL) that includes Kaiser Permanente members. The NCAL population has almost double the percentage of Hispanic/Latinos compared to the KP-MHS population and lower percentages of African-Americans, nonHispanic Whites, and Asian/Pacific Islanders. However, the actual percentage-point difference with regard to nonHispanic Whites and African-Americans is not very large. The KP-MHS population measures higher on SES, with a significantly lower percentage in the very low income and higher percentage in the high income categories and higher educational attainment. While a larger percentage of the KP-MHS population is in good health, the 90% versus 82% difference is relatively small. The prevalence of smoking is lower in the KP-MHS population, but prevalence of obesity and sedentary lifestyle factors either does not significantly differ (men) or is higher in the KP-MHS population (women).

Based on the California Health Interview Survey, in 2007, over three-quarters (79%) of Northern California adults aged 20 and over were covered by some form of private or government-sponsored health insurance other than Medi-Cal (i.e., Kaiser Permanente or the non-Kaiser Permanente Insured excluding Medi-Cal). The statistics presented in this report provide evidence that the Kaiser Permanente membership in Northern California is quite similar to that large insured population with regard to sociodemographic and health characteristics, as well as the general population in Northern California. This suggests that most research conducted with data obtained from the Kaiser Permanente membership should be generalizable to the wider insured population.

References

1. Krieger N. Overcoming the absence of socioeconomic data in medical records: validation and application of a census-based methodology. *Am J Public Health*, 1992 May;82(5):703-10.
2. 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 at: http://www.dor.kaiser.org/external/comparison_kaiser_vs_nonKaiser_adults_kpnc/

3. Gordon NP. Similarity of the Adult Kaiser Permanente Membership in Northern California to the Insured and General Population in Northern California: Statistics from the 2007 California Health Interview Survey. Internal Division of Research report. Oakland, CA: Kaiser Permanente Division of Research; 2006 June. Available at:
http://www.dor.kaiser.org/external/chis_non_kp_2007/
4. A description of the California Health Interview Survey including methods and survey instrument can be found at www.chis.ucla.edu/about.html.
5. California Health Interview Survey. CHIS 2007 Adult Public Use SAS File specially prepared for Kaiser Permanente Division of Research in Oakland, CA. Los Angeles, CA: UCLA Center for Health Policy Research, March 2009.
6. A description of the Kaiser Permanente Northern California Adult Member Health Survey, copy of the survey questionnaire, and selected survey results can be found at www.memberhealthsurvey.kaiser.org.

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http://www.dor.kaiser.org/external/chis_mhs_comparison_2008/

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Table 1. Age and Gender Distribution of Northern California Kaiser Permanente and non-Kaiser Permanente Populations Aged 25-79

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Gender								
Female	52.0	0.5	51.6	1.4	50.6	0.8	50.4	0.6
Male	48.0	0.5	48.4	1.4	49.4	0.8	49.6	0.6
Age, All								
25-34 yr	21.3	0.5	16.9	1.3	17.1	0.7	20.4	0.6
35-44 yr	22.1	0.4	23.0	1.3	23.6	0.7	24.5	0.6
45-54 yr	23.5	0.5	23.9	1.2	24.4	0.6	23.8	0.5
55-64 yr	19.1	0.4	21.4	1.0	18.0	0.5	17.9	0.4
65-79 yr	14.0	0.2	14.8	0.8	16.9	0.5	13.4	0.3
Mean age	47.9 ^{a,b}	0.1	49.1 ^c	0.4	49.1	0.2	47.5	0.2
Age, All Women								
25-34 yr	21.2	0.5	15.7	1.6	17.8	1.0	20.0	0.8
35-44 yr	21.6	0.6	21.5	1.5	22.4	0.9	23.5	0.7
45-54 yr	23.3	0.5	25.3	1.5	25.1	0.8	24.6	0.7
55-64 yr	19.3	0.3	22.1	1.2	17.6	0.6	18.1	0.5
65-79 yr	14.6	0.3	15.4	1.0	17.1	0.6	13.8	0.4
Mean age	48.1 ^{a,b}	0.2	49.8 ^c	0.5	49.2	0.3	47.9	0.2
Age, All Men								
25-34 yr	21.5	0.8	18.3	2.0	16.4	1.1	20.8	0.9
35-44 yr	22.8	0.7	24.5	2.1	24.8	1.1	25.6	0.9
45-54 yr	23.7	0.7	22.4	1.8	23.8	1.0	23.0	0.8
55-64 yr	18.7	0.5	20.6	1.5	18.4	0.8	17.6	0.6
65-79 yr	13.3	0.3	14.2	1.2	16.6	0.7	13.0	0.5
Mean age	47.7 ^b	0.2	48.3 ^c	0.6	49.1	0.3	47.2	0.2

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

^a Significantly different from KP-CHIS at p<.05 or greater.

^b Significantly different from nonKP Insured population at p<.05 or greater.

^c Significantly different from NCAL population at p<.05 or greater.

Table 2A. Comparison of Sociodemographic Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Race-Ethnicity								
White nonHispanic	59.8 ^c	0.5	56.1 ^b	1.4	62.4	0.8	54.9	0.7
Afr-American/Black	6.2 ^c	0.2	7.9 ^b	0.8	3.9	0.4	5.5	0.4
Latino/Hispanic	12.3 ^{a,b,c}	0.3	18.8 ^c	1.3	16.1	0.7	22.4	0.6
Asian/Pac Islander	19.2 ^{a,b,c}	0.4	15.9	1.2	15.5	0.7	15.1	0.5
Other	2.5	0.2	1.3	1.3	2.1	0.2	2.1	0.1
Income								
≤ \$25,000	8.3 ^{b,c}	0.3	9.0 ^{b,c}	0.7	14.3	0.6	21.3	0.6
\$25,001-\$35,000	7.0		7.2		6.3		7.5	
\$35,001-\$65,000	25.6		26.6		23.3		23.4	
\$65,001-\$80,000	13.9		12.9		11.1		10.1	
\$80,001-\$100,000	13.8		14.2		12.8		11.3	
> \$100,000	31.3 ^c	0.4	30.0 ^c	1.2	32.4	0.7	26.4	0.5
Education								
< HS Grad	3.4 ^{a,b,c}	0.2	7.3 ^c	0.9	9.0	0.5	14.2	0.5
HS Grad	14.8 ^{a,b,c}	0.4	21.1	1.1	22.0	0.7	23.0	0.6
Some Post-HS	36.5 ^{a,b,c}	0.5	27.7	1.3	22.6	0.6	23.4	0.5
4 Yr College Grad	45.3 ^c	0.5	43.9 ^c	1.4	46.4	0.7	39.4	0.6
Employment Status								
Works ≥ 20 hrs/wk	68.6 ^{b,c}	0.4	68.3 ^{b,c}	1.2	63.3	0.7	62.8	0.6
Marital Status								
Married/Part of an unmarried couple	77.7 ^c	0.4	73.7	1.3	77.3	0.6	72.7	0.6

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

- ^a Significantly different from KP-CHIS at p<.05 or greater.
- ^b Significantly different from nonKP Insured population at p<.05 or greater.
- ^c Significantly different from NCAL population at p<.05 or greater.

Table 2M. Comparison of Sociodemographic Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79: MEN

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Race-Ethnicity								
White nonHispanic	59.9 ^c	0.8	54.7 ^b	2.3	63.2	1.2	54.7	1.0
Afr-American/Black	5.5	0.4	6.0	1.0	4.2	0.6	5.2	0.6
Latino/Hispanic	12.6 ^{a,b,c}	0.6	20.9	2.2	16.4	1.0	24.0	1.0
Asian/Pac Islander	19.5 ^{b,c}	0.8	17.3	2.0	14.0	0.9	14.0	0.8
Other	2.5	0.2	1.1	0.3	2.2	0.3	2.1	0.2
Income								
≤ \$25,000	6.4 ^{b,c}	0.4	5.7 ^{b,c}	0.8	13.4	0.9	19.4	0.9
\$25,001-\$35,000	6.3		6.9		6.0		7.2	
\$35,001-\$65,000	25.0		27.0		22.2		23.3	
\$65,001-\$80,000	13.8		12.6		11.0		10.0	
\$80,001-\$100,000	14.2		14.4		12.7		11.4	
> \$100,000	34.3 ^c	0.8	33.4	1.9	34.6	1.1	28.6	0.8
Education								
< HS Grad	3.7 ^{a,b,c}	0.7	7.9 ^c	1.5	9.5	0.8	15.1	0.8
HS Grad	15.2 ^{a,b,c}	.06	21.8	1.8	21.9	1.1	23.4	0.9
Some Post-HS	35.3 ^{a,b,c}	.08	26.3	2.1	21.0	0.9	21.7	0.8
4 Yr College Grad	45.8 ^c	0.8	44.0	2.1	47.6	1.1	39.8	0.9
Employment Status								
Works ≥ 20 hrs/wk	74.1	0.6	75.3	1.9	72.0	1.0	71.8	0.9
Marital Status								
Married/Part of an unmarried couple	80.4	0.7	76.8	2.2	80.1	0.9	75.2	0.9

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

- ^a Significantly different from KP-CHIS at p<.05 or greater.
- ^b Significantly different from nonKP Insured population at p<.05 or greater.
- ^c Significantly different from NCAL population at p<.05 or greater.

Table 2W. Comparison of Sociodemographic Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79: WOMEN

	NCAL Kaiser Permanente Members (KP-MHS2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Race-Ethnicity								
White nonHispanic	59.8	0.6	57.4 ^b	1.8	61.6	1.1	55.1	0.8
Afr-American/Black	6.8 ^a	0.3	9.8 ^{b,c}	1.1	3.6	0.4	5.9	0.4
Latino/Hispanic	12.1 ^c	0.4	16.8	1.5	15.8	0.8	20.8	0.7
Asian/Pac Islander	18.8	0.5	14.6	1.4	17.0	1.0	16.1	0.7
Other	2.5	0.2	1.4	0.3	2.1	0.2	2.1	0.2
Income								
≤ \$25,000	10.0 ^{b,c}	0.4	12.1 ^{b,c}	1.1	15.2	0.7	23.0	0.7
\$25,001-\$35,000	7.7		7.5		6.6		7.7	
\$35,001-\$65,000	26.2		26.2		24.2		23.5	
\$65,001-\$80,000	14.1		13.2		11.3		10.3	
\$80,001-\$100,000	13.5		14.1		12.8		11.2	
> \$100,000	28.6 ^c	0.6	26.9	1.5	29.9	0.9	24.3	0.6
Education								
< HS Grad	3.1 ^{b,c}	0.2	6.8 ^c	1.1	8.7	0.7	13.3	0.6
HS Grad	14.4 ^{b,c}	0.4	20.4	1.4	22.0	0.8	22.6	0.7
Some Post-HS	37.6 ^{b,c}	0.6	29.1	1.5	24.1	0.8	25.1	0.7
4 Yr College Grad	44.9 ^c	0.5	43.7	1.7	45.2	1.0	39.0	0.8
Employment Status								
Works ≥ 20 hrs/wk	63.6 ^{b,c}	0.6	61.7 ^{b,c}	1.6	54.9	1.0	53.9	0.8
Marital Status								
Married/Part of an unmarried couple	75.3 ^c	0.5	70.8	1.6	74.5	0.8	70.3	0.7

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

^a Significantly different from KP-CHIS at p<.05 or greater.

^b Significantly different from nonKP Insured population at p<.05 or greater.

^c Significantly different from NCAL population at p<.05 or greater.

Table 3A. Comparison of Health Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Health Status								
Good, Very Good, or Excellent Health	90.0 ^{b,c}	0.3	86.9 ^c	0.9	84.3	0.6	82.2	0.5
Good, Very Good, or Excellent Health (ages 40+)	88.1 ^{b,c}	0.3	84.5 ^c	1.1	81.8	0.6	79.7	0.5
Chronic Conditions								
History of Diabetes (ages 40+)	11.9	0.3	11.1	0.9	10.6	0.5	11.1	0.
History of High Blood Pressure (ages 40+)	39.0	0.5	39.4	1.5	36.5	0.8	36.4	0.6
History of Heart Disease (ages 40+)	7.0 ^{b,c}	0.3	7.9	0.7	9.5	0.4	8.7	0.3
History of Asthma (ages 25-79)	11.2 ^{a,b,c}	0.3	15.3	1.0	14.4	0.6	14.1	0.4
Behavioral Risks								
Smoking Status								
Current Smoker	9.9 ^c	0.3	12.8	1.1	11.0	0.5	14.4	0.5
Ever Regular Smoker	28.9 ¹	0.4	41.6	1.4	40.3	0.7	42.2	0.6
Obese (BMI ≥ 30)	26.5 ^b	0.5	26.8 ^b	1.3	22.0	0.5	24.4	0.6
Sedentary (no regular weekly exercise)	16.4 ^{a,b,c}	0.4	11.8	0.8	11.9	0.5	13.0	0.4

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

^a Significantly different from KP-CHIS at p<.05 or greater.

^b Significantly different from nonKP Insured population at p<.05 or greater.

^c Significantly different from NCAL population at p<.05 or greater.

¹ The lower estimate of “Ever Regular Smoker” for MHS2008 is likely due to differences in the wording of the questions from which this was estimated. The MHS 2008 estimate defines “Ever Regular Smoker” as someone who said “Yes” to having smoked cigarettes daily for at least a year. The estimate of people who ever smoked increases to 59.5% (se 0.5) if people who indicated they smoked in the past, but not daily for a year, are included.

Table 3M. Comparison of Health Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79: MEN

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP-CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Health Status								
Good, Very Good, or Excellent Health	90.0 ^{b,c}	0.4	88.1 ^{b,c}	1.2	83.5	0.9	82.4	0.7
Good, Very Good, or Excellent Health (ages 40+)	87.8 ^{b,c}	0.5	85.8 ^{b,c}	1.5	81.0	1.0	80.0	0.8
Chronic Conditions								
History of Diabetes (ages 40+)	13.6	0.5	12.3	1.5	11.8	0.8	12.4	0.7
History of High Blood Pressure (ages 40+)	41.2	0.8	38.9	1.5	38.1	1.2	36.9	1.3
History of Heart Disease (ages 40+)	8.9	0.4	10.6	1.3	10.8	0.7	10.1	0.5
History of Asthma (ages 25-79)	9.0	0.5	12.0	1.6	12.3	0.8	11.9	0.7
Behavioral Risks								
Smoking Status								
Current Smoker	11.6 ^c	0.5	16.3	1.9	12.7	0.7	16.9	0.8
Ever Regular Smoker	30.1 ¹	0.7	49.6	2.2	46.6	1.0	49.5	1.0
Obese (BMI ≥ 30)	26.0	0.7	29.3 ^b	2.1	23.6	1.0	25.5	0.9
Sedentary (no regular weekly exercise)	15.2	0.6	10.3	10.3	11.3	1.0	12.3	0.6

NOTES: MHS 2008 = Derived from Kaiser Permanente 2008 Member Health Survey data;
CHIS 2007 = Derived from 2007 California Health Interview Survey data.

^a Significantly different from KP-CHIS at p<.05 or greater.

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^c Significantly different from NCAL population at p<.05 or greater.

¹ The lower estimate of “Ever Regular Smoker” for MHS2008 is likely due to differences in the wording of the questions from which this was estimated. The MHS 2008 estimate defines “Ever Regular Smoker” as someone who said “Yes” to having smoked cigarettes daily for at least a year. The estimate of people who ever smoked increases to 62.5% (se 0.8) if people who indicated they smoked in the past, but not daily for a year, are included.

Table 3W. Comparison of Health Characteristics of the Northern California Kaiser Permanente Member Population and non-Kaiser Permanente Populations Aged 25-79: WOMEN

	NCAL Kaiser Permanente Members (KP-MHS 2008)		NCAL Kaiser Permanente Members (KP- CHIS 2007)		NCAL Non-Kaiser Permanente Insured (Excluding Medi-Cal) (CHIS 2007)		All NCAL (CHIS 2007)	
	%	s.e.	%	s.e.	%	s.e.	%	s.e.
Health Status								
Good, Very Good, or Excellent Health	90.1 ^c	0.4	85.7	1.3	85.1	0.7	82.0	0.6
Good, Very Good, or Excellent Health (ages 40+)	88.5 ^c	0.4	83.3	1.5	82.6	0.8	79.4	0.7
Chronic Conditions								
History of Diabetes (ages 40+)	10.4	0.4	10.1	1.1	9.4	0.6	9.9	0.5
History of High Blood Pressure (ages 40+)	36.9	0.7	39.9	1.8	34.9	1.1	35.8	0.8
History of Heart Disease (ages 40+)	5.3 ^{b,c}	0.4	5.6 ^b	0.7	8.3	0.5	7.4	0.4
History of Asthma (ages 25-79)	13.2 ^{a,b,c}	0.4	18.5	1.3	16.0	0.8	16.8	0.6
Behavioral Risks								
Smoking Status								
Current Smoker	8.4 ^c	0.4	9.6	1.1	9.3	0.5	11.9	0.5
Ever Regular Smoker	27.3 ¹	0.5	34.1	1.6	34.2	0.9	35.1	0.7
Obese (BMI ≥ 30)	27.0 ^{b,c}	0.6	24.4	1.5	20.4	0.8	23.4	0.7
Sedentary (no regular weekly exercise)	17.4 ^{b,c}	0.5	13.3	1.1	12.5	0.6	13.6	0.5

MHS 2008: Statistics derived from Kaiser Permanente 2008 Member Health Survey data;
 CHIS 2007: Statistics derived from 2007 California Health Interview Survey data.

^a Significantly different from KP-CHIS at p<.05 or greater.

^b Significantly different from nonKP Insured population at p<.05 or greater.

^c Significantly different from NCAL population at p<.05 or greater.

¹ The lower estimate of “Ever Regular Smoker” for MHS2008 is likely due to differences in the wording of the questions from which this was estimated. The MHS 2008 estimate defines “Ever Regular Smoker” as someone who said “Yes” to having smoked cigarettes daily for at least a year. The estimate of people who ever smoked increases to 56.7% (se 0.6) if people who indicated they smoked in the past, but not daily for a year, are included.