

# Highlights of Results of the Kaiser Permanente Northern California 2011 Member Health Survey<sup>1</sup>

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## Introduction

Who are our members, and what is the status of their health? What behaviors are they engaging in that can promote or harm their health? What tools do they have that can be used to communicate with them about their health? And what are their preferences for seeking out health information and education to maintain and improve their health? This report provides some answers to these questions as it highlights some of the results of the 2011 Member Health Survey conducted by the Kaiser Permanente Northern California Division of Research.

## Background

The Member Health Survey has been conducted every 3 years since 1993 with a stratified random sample of adults who are current members of the Kaiser Permanente Medical Care Program in Northern California. The primary purposes of the survey are:

- To learn about the health-related needs and interests of the culturally diverse Kaiser Permanente Northern California adult membership, and by extension, members of the communities we serve;
- To provide information for health services planners to make evidence-based decisions about health information and health care service delivery; and
- To support research to improve the health of our members and the communities we serve.

The Member Health Survey is funded by Kaiser Permanente's Northern California Community Benefit (CB) Program. Reports and statistics based on the 2011 survey, survey questionnaires, and statistics from past surveys can be found on our website [www.memberhealthsurvey.kaiser.org](http://www.memberhealthsurvey.kaiser.org) or made available upon request.

## Methods

The 2011 Member Health Survey data was conducted starting in Spring 2011 using mailed questionnaires sent to 43,000 current members aged 20 and over, with the option of completing the survey online. The survey used a stratified random sample design in which pre-set numbers of women and men from five age groups (20–44, 45–64, 65–74, 75–79, and 80+) were randomly selected from each of our nineteen Northern California medical center service populations.

Of those contacted to participate, nearly 17,000 adults responded, with seniors responding at the highest rates. Post-stratification weighting factors were assigned to respondents so that statistics

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generated from the survey reflect the actual age, gender, and geographic composition of the adult membership at the time of the survey obtained from complex survey designs. Comparisons across race-ethnic groups are restricted to members aged 25–79. Unless otherwise specified, all other comparisons are for adults aged 20 and over or ages 20–44, 45–64, and 65 and over. All demographic differences indicated in the text are statistically significant at a minimum of  $p < .05$  based on statistical tests for data.

More information about the survey design, response rates, and weighting can be found at the end of this report.

## Overview of Results

The 2011 Member Health Survey shows that compared with the survey in 2008:

- The racial and ethnic diversity and educational attainment of the adult membership remained about the same.
- The percentages of members reporting very good or excellent health remained the same.
- Slightly higher percentages of adult members were eating at least three servings of fruits and vegetables per day, mainly due to increases among 20–44 year olds, but the percentages eating five or more servings remained very low across all age groups.
- There was no change in the percentages that were trying most of the time to eat reduced-fat foods.
- The percentages of adults who got exercise less than once a week declined and the percentages that got exercise at least three times a week increased, primarily due to changes among men and women under age 65.
- The percentages of adults who ever smoke or who smoke more than occasionally did not significantly change. However, the percentage of adults who had ever regularly smoked decreased, primarily due to drops in ever-regular smoking among women under age 65.
- The percentages of adults who were obese (BMI  $\geq 30$ ) and moderately to severely obese (BMI  $\geq 35$ ) remained the same.
- Member access to the Internet and email has increased, as have the percentages of members who got information from Internet websites during the previous 12 months and were interested in using the Internet to get health information and health education in the future. These increases are primarily due to large changes in Internet access and use among middle-aged adults and adults aged 65 and over.

In addition, the survey shows:

- Over 90% of adult members are satisfied with their life in general and nearly 90% say that they are pretty happy or very happy.
- Over 80% of our adult members believe that their health behaviors/lifestyle (such as diet, obesity, and exercise) can greatly impact their health.

## Result Highlights by Category

- Demographic characteristics
- Health status
- Health behaviors and psychosocial/lifestyle risks
- Use of complementary and alternative medicine (CAM) and nonvitamin/nonmineral dietary supplements
- Access to digital technology (computer, Internet, mobile phones)
- Methods used for obtaining health information and health education in the past year
- Preferred methods for obtaining health information and health education

## Demographic Characteristics

### Race/Ethnic Composition:

- Approximately 60% of non-Hispanic white adult members are 60%, 6% African-American/black, 12% Latino/other Hispanic, and 19% Asian.
- The race-ethnic composition of the adult membership varies by age group. Non-Hispanic whites make up 50% of members aged 20–44, 65% of those aged 45–64, and 75% of those aged 65 and over; Asians make up 25%, 16%, and 10% of these age groups, respectively; and Latinos make up 16%, 9%, and 7%, respectively. The percentage of members who are African-American/black does not significantly vary across age groups.

### Educational Attainment:

- Among members aged 25 and over, 48% are college graduates, and 79% have at least some college education.
- Educational attainment significantly declines with age. For example 57% of members aged 25–44, 44% of those aged 45–64, and 37% of those aged 65 and over are college graduates.
- Among seniors, men have significantly higher educational attainment than women (44% vs. 31%, respectively, who are college graduates). Among other age groups, there is no gender difference in educational attainment.
- There are significant race-ethnic disparities in educational attainment, especially among older members. Among non-Hispanic whites, 60% of members aged 25–44, 45% of those aged 45–64, and 42% of those aged 65–79 are college graduates. Compared to non-Hispanic whites, the percentages for blacks and Latinos in these age groups are significantly lower (blacks: 37%, 31%, and 26%; Latinos, 33%, 25%, and 16%), while the percentages of college graduates by age group for Filipinos and Chinese are significantly higher (Filipino: 59%, 56%, and 54%; Chinese 83%, 64%, and 54%). Across all age groups, Latinos are significantly less likely than these other race-ethnic groups to have attended any college. Among seniors, blacks are also significantly less likely than non-Hispanic whites to have attended any college.

### Employment:

- In 2011, 87% of men and 80% of women aged 20–64 reported being part of the workforce. An additional 5% of 20–44 year olds and 4% of 45–64 year olds were unemployed or laid off.
- Approximately 2% of members aged 20–44 and 16% of those aged 45–64 were retired or unable to work due to health problems.
- While the majority of men and women aged 65 and over were retired, 20% of men and 12% of women were still in the workforce. Approximately 39% of 65–66 year olds and 29% of 67–69 year olds were working at least part time, but after that, the percentages reporting being a part-time or full-time worker sharply decline.

### Committed Relationship:

- In 2011, 78% of men and 72% of women aged 20 and over were married or in a marriage-like relationship; however, the percentage of women in such relationships declined with age.
- Fewer than half of women aged 65 and older are married or in a marriage-like relationship.
- Across all three age groups, black women are significantly less likely to be married or in a marriage-like relationship than are non-Hispanic white, Latina, Filipina, and Chinese women.

## Health Status

### Overall Health:

- In 2011, 56% of adult members rated their health as “very good” or “excellent,” and 89% rated their health as “good” or better. The percentages reporting very good/excellent health significantly decline with age: 64% of 20–44 year olds, 54% of 45–64 year olds, 47% of 65–74 year olds, 38% of 75–79 year olds, and 24% of those aged 80 and over. The percentages reporting “fair” or “poor” health increase with age: 6% of 20–44 year olds, 11% of 45–64 year olds, 12% 65–74 year olds, 19% of 75–79 year olds, and 28% of those aged 80 and over.
- When physical health and emotional health are rated separately, decline in rating of physical health as “very good” or “excellent” parallels that for overall health. However, this is not the case for rating of overall emotional well being, where there is no age group-related decline in the percentage of adult rating their emotional health as “very good” or “excellent” until the 75–79 year old age group. Among all seniors, significantly higher percentages of adults rate their emotional health as “very good” or “excellent” than rate their physical health at that level.
- There are no significant gender differences in rating of overall health status, physical health status, or emotional health status.
- Compared to non-Hispanic whites, blacks and Latinos are significantly less likely to rate their health as “very good” or “excellent” across all age groups, and beginning at middle age, Filipinos are also less likely to rate their health as “very good” or “excellent.” Among seniors, blacks, Latinos, and Filipinos are significantly more likely than non-Hispanic whites to rate their health as “fair” or “poor.”

### Chronic Conditions Related to Cardiovascular Disease:

- In 2011, 11% of members aged 45–64 had diabetes, 33% had high blood pressure, and 29% had high cholesterol, with prevalence of all three conditions significantly higher among men. Among those aged 65 and over, 18% had diabetes, 62% had high blood pressure, and 50% had high cholesterol, with significantly higher prevalence of diabetes and high cholesterol among men, but no gender difference for high blood pressure.
- Among 45–64 year olds, 22% had at least two of these chronic conditions, with prevalence increasing to 42% among seniors. In both age groups, men are significantly more likely than women to have at least two of these chronic conditions.
- Among adults aged 45–64 and 65–79, there were significant race-ethnic differences in prevalence of diabetes and high blood pressure, but not high cholesterol.
  - Among both middle-aged and older adults, blacks, Latinos and Filipinos are significantly more likely to have diabetes than non-Hispanic whites and Chinese members.
  - Among both middle-aged and older adults, blacks and Filipinos are significantly more likely to have high blood pressure than non-Hispanic whites.
  - Among middle-aged and older adults, blacks, Latinos, and Filipinos are significantly more likely to have both diabetes and high blood pressure than non-Hispanic whites.

### Pain:

- Severe or Chronic Pain: In 2011, approximately 32% of women and 25% of men experienced some kind of severe or frequent/chronic pain during the previous year. The prevalence of severe or frequent/chronic pain was similar across age groups and race/ethnic groups.
- Musculoskeletal Pain: 18% of members experienced musculoskeletal pain in the form of severe back pain/sciatica or neck/shoulder pain during the previous 12 months. The

prevalence of musculoskeletal pain was somewhat higher among middle aged and older adults.

- Headaches: Nearly 14% of women and 6% of men experienced severe headaches during the previous year. The overall prevalence of migraine headaches was over twice as high for women as for men (11% vs. 4%). Prevalence of any type of severe headache, including migraine, was higher among adults under age 65 (15% of women aged 20–64 vs. 6% for women 65 and 6% of men aged 20–64 vs. 2 % of men aged 65 and over)
- Arthritis: Approximately 13% of women aged 45–64 and 30% of women aged 65 or older had arthritis, significantly higher than the prevalence of 9% and 19%, respectively, for men in these age groups.

#### Urinary Incontinence (UI):

- In 2011, 12% of women aged 45–64, 28% of women aged 65 and older, and 12% of men aged 65 and older experienced urine leakage at least once a week during the previous year. Among women aged 65 and over, 21% of 65–74 year olds, 30% of 75–79 year olds, and nearly 40% of those aged 80 and over experienced UI. Among men in these age groups, UI was experienced by 8%, 12%, and 21%, respectively.

#### Fall Risk and Falls (Ages 65 and over only):

- In 2011, 19% of women and men aged 65 and older experienced problems with balance or walking. The percentage of adults experiencing this problem is significantly higher among older seniors than younger seniors (18% of those aged 75–79 and 34% of those aged 80 and over vs. 11% of those aged 65–74).
- Approximately 23% of women and men reported falling at least once during the previous 12 months (19%, 22%, and 32% of ages 65–74, 75–79, and 80 and over, respectively). However, the percentages of adults who fell more than once is significantly lower (8%, 11%, and 18%, respectively).

## Health Behaviors, Psychosocial and Lifestyle Risks

#### Smoking:

- In 2011, slightly fewer than 9% (8.6%) of all adult members smoked cigarettes at least occasionally and 7% smoked regularly. Prevalence of smoking was significantly higher among adults aged 20–64 than those aged 65 and over (9.5% vs. 5%)
- Among all adults aged 20–64, men are significantly more likely than women to be regular smokers (11% vs. 8% for ages 20–64, 6% vs. 4% for ages 65 and over).
- Over half (58%) of adults who had smoked during at least part of the year prior to the survey had either quit, attempted to quit or were taking steps toward quitting.
- Nearly 30% (29%) of adults have smoked in the past. However, younger and middle-aged adults are less likely to report ever smoking than those in the older age group (20%, 32%, and 44%, respectively). Within each age group, women are less likely than men to report ever smoking (18% vs. 22%. 30% vs. 34%, and 37% vs. 53%).
- Across all age groups, black women and men are approximately twice as likely non-Hispanic white women and men to be current smokers. Additionally, while in other race-ethnic groups women are significantly less likely than men to smoke, no gender difference is observed among blacks.

#### Overweight and Obesity:

- In 2011, approximately 60% of adults (53% of women and 67% of men) were overweight or obese (BMI  $\geq$  25); 26% of adults (no gender difference) were obese (BMI  $\geq$  30), with 10% (11% of women, 9% of men) having a BMI  $\geq$  35.

- Middle-aged men and women are significantly more likely to be obese (BMI  $\geq$  30) than men and women in the older age groups (29% vs. 23% and 23%, respectively), with no significant gender difference within age groups. However, among middle-aged and older adults, women are significantly more likely than men to have a BMI  $\geq$  35 (15% vs. 10% and 9% vs. 6%, respectively)
- Across all age and gender groups, prevalence of obesity (BMI  $\geq$  30) is significantly higher among blacks than non-Hispanic whites.

#### Exercise:

- In 2011, approximately 15% of adults were sedentary (routinely getting exercise less than once a week); 62% were getting exercise at least three times a week; and 29% were getting exercise five or more times a week.
- Seniors are slightly more likely (64% vs. 61%) than those under 65 to get exercise regularly three or more times a week; however, the cardiovascular value of that regular exercise differed by age, with seniors who are getting exercise significantly less likely than non-seniors to be engaging in moderate to vigorous exercise (46% vs. 68%).
- Among women under age 65, non-Hispanic white women were significantly less likely than black, Latina, Filipina, and Chinese women to report sedentary behavior. Among men in this age group, Filipinos were significantly more likely than non-Hispanic whites to report being sedentary.

#### Fruit and Vegetable Consumption:

- In 2011, 48% of adult members reported eating three or more servings of fruits and vegetables per day, and 15% were consuming five or more servings per day. These percentages reflect a slight increase compared to 2008 and are primarily to increases in fruit and vegetable consumption among young adults.
- Women are more likely than men to be consuming at least three servings of fruits and vegetables a day (55% vs. 39%) and at least five servings per day (18% vs. 11%). Consumption at this level did not differ across age group.
- Across all age and gender groups, blacks, Latinos, and Filipinos are less likely than non-Hispanic whites to consume at least three servings of fruit and vegetables per day.

#### Effort Made to Eat Reduced-fat Foods and Avoid High Sodium Foods:

- In 2011, 47% of adults (52% of women and 41% of men) reported that they usually tried to eat reduced-fat foods most of the time. Younger adults were significantly less likely than those aged 45 and over to try to eat reduced-fat foods most of the time (by age, 47% vs. 55% of women and 35% vs. 46% of men, respectively).
- In 2011, 56% of adults (60% of women and 51% of men) tried to avoid foods high in salt or sodium most of the time. Again, younger adults were significantly less likely to do so than those aged 45 and over (by age, 65% vs. 54% of women and 56% vs. 45% of men, respectively)
- Among women aged 25–44 and 45–79, blacks and Filipinas were significantly less likely than non-Hispanic white women to try to eat reduced-fat foods most of the time. Among men and women aged 45–79, Filipinos were significantly less likely than non-Hispanic whites to be making an effort to avoid high sodium foods.

#### Use of Multivitamins, Calcium and Vitamin D:

- In 2011, 56% of women and 45% of men took a daily multivitamin, with no significant difference by age group.
- 42% of women and 13% of men took a calcium supplement, and nearly all were getting vitamin D along with the calcium.

- 19% of women and 11% of men were taking a vitamin D supplement not as part of a multivitamin or calcium supplement).
- While the percentages of women and men who took a daily multivitamin did not significantly differ by age, calcium supplementation was significantly lower among 20–44 year olds than those aged 45 and over (by age, 23% vs. 52% and 62% of women and 9% vs. 13% and 24% of men, respectively). This was also true for vitamin D supplementation (10% vs. 23% and 30% of women and 5% vs. 13% and 19% of men).
- Among women in both the 25–44 and 45–79 year age groups, black, Latina, Filipina, and Chinese women are significantly less likely to take multivitamins than non-Hispanic white women. Among men, multivitamin use does not significantly differ by race-ethnicity in the younger group, but is significantly higher among non-Hispanic whites than the other race-ethnic groups among those aged 45–79.

#### Alcohol Consumption:

- Nearly one-quarter of adults (26% of women and 21% of men) abstained from alcohol during the previous year. Older adults were significantly more likely to abstain from drinking than younger and middle-aged adults (37% vs. 23%, respectively, for women and 28% vs. 19% for men).
- About 10% of adults have one or more drinks almost every day. Among both women and men, the percentage that drank almost daily significantly increased with age (3%, 9%, and 14% of women and 7%, 13%, and 21% of men, for ages 20–44, 45–64, and 65 and over, respectively).
- For both women and men, the 65 and over age group has the highest percentages of abstainers and people who have one or more drinks most days.
- If at-risk drinking is defined as having more than one drink at a time for women and more than two drinks at a time for men, in 2011 33% of women (by age group, 41%, 31%, and 19%) and 21% of men (by age group 29%, 17%, and 11%) were at-risk drinkers. If at-risk drinking were also defined as > 2 drinks per day for women, the percentage of at-risk women drinkers would drop to 10% (by age group, 16%, 7% and 4%).
- If at-risk drinking is defined as > 7 drinks per week for women and > 14 drinks per week for men, then 9% of women and 7% of men are at-risk drinkers.
- Abstinence from alcohol is significantly greater among blacks (25% of ages 25–64 and 47% of ages 65–79), Filipinos (36% of ages 25–64 and 57% of ages 65–79), and Chinese (30% of ages 25–64 and 50% of ages 65–79) than among non-Hispanic whites (16% of ages 25–64 and 25% of ages 65–79) and Latinos (19% of ages 25–64 and 33% of ages 65–79). Among Latinos, Filipinos, and Chinese aged 25–64 year, women are significantly more likely to be abstinent than men. Among those aged 65–79, this gender difference occurs among for non-Hispanic whites, Latinos, and Filipinos.
- Significantly higher percentages of non-Hispanic white men drink five or more times a week than do black, Latino, Filipino, and Chinese men (ages 25–64: 22% vs. 15%, 10%, 5%, and 7%, respectively; ages 65–79: 31% vs. 6%, 20%, 8%, and 8%, respectively). The same true of non-Hispanic white women compared with the other race-ethnic groups (ages 25–64: 14% vs. 5%, 5%, 2%, and 2%; ages 65–79: 22%, 4%, 9%, 1% and <1%))
- At-risk drinking based on > 7 drinks/week for women and > 14 drinks/week for men is significantly higher among non-Hispanic white women (12%) and men (9%) than other race-ethnic groups, with no significant difference between those under age 65 and those aged 65–79.

#### Emotional Health:

- Chronic Stress: In 2008, 17% of adult members reported feeling very stressed, tense, or anxious much of the time. Chronic stress is significantly more prevalent among working age

adults, and within that age group, among women (ages 25–64: 23% of women and 15% of men; ages 65 and over: 7% of women and 4% of men).

- Among women aged 25–64, black women were significantly more likely than non-Hispanic white women (30% vs. 23%) to experience chronic stress (30%), with Latinas falling in between (26%) and Filipina (17%) and Chinese (15%) women significantly less likely than both.
- In this age group, black and Latina women are significantly more likely than non-Hispanic whites to be very worried about their financial situation (43% and 37% vs. 31%) and their/their family's safety due to violent crime (11% and 9% vs. 5%). black women are also significantly more likely than non-Hispanic whites to have experienced harassment or discrimination in the previous 12 months (12% vs. 5%).
- Depression and/or Anxiety: Approximately 16% of adult members experienced depression or anxiety/panic lasting at least two weeks during the previous 12 months or were taking antidepressant or anti-anxiety medication during that interval. Women are more likely than men to report these conditions (20% vs. 13%, respectively), with no significant age group differences.
- Life Satisfaction and Overall Happiness: 91% of adults reported being fairly or very satisfied with their lives in general, with no significant age or gender differences. The percentage of adults reporting being pretty or very happy is only slightly less (89%).
  - Among women aged 25–64, black women are significantly less likely than non-Hispanic white women to be satisfied with their life (85% vs. 93%) and pretty or very happy (82% vs. 90%).
- At-Risk Emotional Health: Overall, 28% of adult members reported difficulties indicative of emotional health risks (defined as being very stressed most of the time, not at all satisfied with life, having treated or untreated depression or anxiety, having an alcohol or drug problem, or overall rating of emotional health as fair or poor or emotional health interfering with daily life at least moderately), with women having a higher prevalence of risk than men (ages 20–64: 31% vs. 26%; ages 65 and over: 28% vs. 22%) There were no significant differences by race/ethnicity.

#### Sleep:

- In 2011, approximately 68% of adults were regularly getting the recommended 7–9 hours of sleep per day. Over one-fourth (28%) were regularly getting less than 7 hours of sleep, with nearly 7% getting less than 6 hours.
- Adults aged 20–64 were significantly more likely than older adults to get less than 7 hours of sleep (29% vs. 22%), with no significant gender difference. Adults aged 65 and over were significantly more likely than those under age 65 to report sleeping more than 9 hours per day (8% vs. 3%).
- Approximately 9% of adults experienced insomnia (frequent problems falling or staying asleep). Insomnia was significantly more common among adults aged 45 and over (12% of women and 8% of men) than among younger adults (7% of women and 6% of men).
- Nearly 12% of all adults and over 40% of adults with insomnia used a prescription or over-the-counter sleep medication at least once during the previous year.
- Among those aged 25–64, 45% blacks, 43% of Filipinos, 34% of Latinos, and 33% of Chinese adults usually get less than 7 hours of sleep, significantly higher percentages than for non-Hispanic whites (25%). Among those aged 65–79: 31% of blacks, 44% of Filipinos, 32% of Chinese, 26% of Latinos, and 19% of non-Hispanic whites usually get less than 7 hours of sleep.



## Health-Related Behaviors to Maintain or Improve Health:

- **Getting Exercise:** In 2011, 60% of adults say they try to get exercise most days. Approximately 48% indicated trying to get moderate or vigorous exercise most days and an additional 12% tried to take daily walks, with no significant differences by age or gender.
- **Healthy Eating:** Nearly three-quarters (74%) of adults say they try to eat mostly healthy foods. Women are also significantly more likely than men to try (78% vs. 68%). Women are also significantly more likely than men to read labels and recipes to learn what is in their food (58% vs. 49%).
- **Losing Weight:** Approximately 60% of adults who are overweight or obese (BMI  $\geq$  25) say they are taking steps to lose weight or maintain weight loss. Overweight adults under the age of 65 are significantly more likely to be doing so than those aged 65 and over (62% vs. 51%, with no significant difference by gender).
- **Getting Enough Sleep:** 69% of adults say they try to get enough sleep to feel well rested. Women are significantly more likely to say they try to do so than men (73% vs. 65%).
- **Managing Stress:** Approximately half of all adults say they are trying to manage stress effectively. Adults under age 65 are significantly more likely to be trying to manage stress than those aged 65 and over (52% vs. 35%), and within these age groups, women are significantly more likely to be making this effort than men (ages 20–64: 57% vs. 46%; ages 65 and over: 40% vs. 28%). These age and gender differences parallel the segments of the membership that are more prone to be stressed.
- **Doing Enjoyable Activities:** Approximately 70% of adults say they do enjoyable activities at least once a week.
- **Reducing Risk of Falling (adults aged 65 and over only):** 39% of all adults aged 65 and over and 58% of those at elevated risk for falls (had at least one fall in the past year or reported a problem with balance/walking) say they are taking steps to reduce risk of falling. However, women are significantly more likely to be taking fall prevention steps than men (46% vs. 30% of all and 62% vs. 51% of those with elevated risk).
- **Keeping the Brain Stimulated (adults aged 65 and over only):** Approximately 71% of adults aged 65 and over say they do activities to keep their brain stimulated. Women are significantly more likely to do so than men (74% vs. 67%).
  - The percentage of adults who do brain stimulating activities increases with level of education (46% of those who did not graduate from high school, 61% of high school graduates, 74% of those with some college, and 81% of college graduates). With the exception of those who did not graduate from high school, women are significantly more likely to engage in brain stimulating activities than men at each higher level of education.
  - Among adults aged 65–79, non-Hispanic whites are significantly more likely to report doing brain stimulating activities than black, Latino, Filipino, and Chinese adults (76% vs. 63%, 63%, 60%, and 60%, respectively). Significant race-ethnic differences remain even after controlling for age, gender, and education.
- **Visiting People At Least Once a Week (adults aged 65 and over only):** Approximately 62% of adults aged 65 and over say they visit with people at least once a week. Women are significantly more likely to do so than men (67% vs. 56%), but having visits at least once a week does not significantly change with age.

## Belief about Relationship of Health Behaviors and Lifestyle with Health:

- In 2011, 85% of adults believed that their health habits/lifestyle (like diet, exercise, and weight) can affect their health quite a bit or extremely, and only around 5% think that their health habits/lifestyle has little or no effect on their health. This is only a slight increase over

the 83% who held this belief in 2008. Among adults aged 20–64, women are significantly more likely to hold this belief than men (88% vs. 82%), but there is no significant gender difference among those aged 65 and over.

- While in 2008, adults under the age of 65 were significantly more likely to hold this belief than those aged 65 and over (84% vs. 77%), in 2011 the age difference is much smaller (85% vs. 83%). In fact, in 2011, 88% of adults aged 65–74, 81% of those aged 74–79, and 75% of those aged 80 and over held this belief compared with 81%, 74%, and 71%, respectively, in 2008.
- Non-Hispanic whites are more likely than blacks, Latinos, Filipinos, and Chinese adults to believe that health habits/lifestyle can have a large impact on their health (90% vs. 83%, 81%, 69%, and 82%, respectively).
- Belief about a causal relationship between health habits/lifestyle and health is significantly associated with educational attainment. College graduates are most likely to believe that this relationship exists (90%), followed by those with some college (85%), high school graduates (77%), and non-high school graduates (62%). These statistics reflect slight increases across all levels of education compared to 2008 (88%, 83%, 73%, and 57%, respectively).
- In 2011, 81% of adults believed that stress and emotional troubles such as depression or anxiety can affect their health quite a bit or extremely. Women under 65 were significantly more likely to hold this belief than similarly aged men and women and men aged 65 and over (85% vs. 79%, 77%, and 74%, respectively). These statistics reflect only slight increases since 2008 for these groups, primarily among those in the older age group (79% of all adults, and 84%, 77%, 71%, and 66%, respectively).
  - Non-Hispanic white and black adults are more likely than Latino, Filipino, and Chinese adults to believe that stress and emotional troubles can have a large impact on their health, but (86% and 82% vs. 77%, 65%, and 76%, respectively).
  - Belief about a causal relationship between stress and emotional troubles and health is significantly associated with educational attainment. College graduates are most likely to believe that this relationship exists (85%), followed by those with some college (81%), high school graduates (75%), and non-high school graduates (60%). These statistics reflect slight increases across all levels of education compared to 2008 (83%, 83%, 70%, and 56%, respectively).

## **Use of Complementary and Alternative Medicine (CAM) and Non-Vitamin/Mineral Dietary Supplements**

Members under 65 make much greater use of CAM than those aged 65 and over, except for prayer and spiritual practice, where the prevalence of use is similar. Unless otherwise specified, the following highlights describe the use of CAM during the 12 months preceding the survey by members aged 20–64. Separate percentages are given for men and women when the differences are statistically significant.

- Approximately 10% of adults used chiropractic care, 4% acupuncture, and 19% (24% of women and 14% of men) massage therapy. Among those who had experienced musculoskeletal pain in the past year, approximately 23% (24% of women and 21% of men) had used chiropractic care, 9% (12% of women and 7% of men) had used acupuncture, and 30% (37% of women and 23% of men) had used massage therapy.
- Approximately 19% of adults (23% of women and 13% of men) had used mind-body medicine techniques (relaxation training, mindfulness or other meditation, visualization, or hypnosis).
- About 13% of adults (18% of women and 7% of men) did yoga, and approximately 2% of men and women did tai chi or other kinds of movement therapy.

- Approximately 15% of adults who experienced frequent insomnia used melatonin in the past year, nearly 30% of adults with arthritis used glucosamine, and 31% of adults used fish oil, flaxseed oil, or omega-3 fatty acid supplements. Among adults aged 65 and over, 10% of those with frequent insomnia had used melatonin, 28% of those with arthritis used Glucosamine, and 37% (40% of women and 32% of men) used fish oil or omega-3 fatty acid supplements.
- Twenty two percent of women and 13% of men used prayer or spiritual practice to improve or maintain their health. Compared to non-Hispanic white women and men, black women and men were significantly more likely to employ prayer or spiritual practice for their health (among blacks, 37% of women and 24% of men vs. 22% and 13% of non-Hispanic white women and men, respectively); Chinese women and men were significantly less likely than non-Hispanic whites to do so (11% of women and 5% of men), with percentages for Latinos and Filipinos slightly higher but not significantly different from non-Hispanic whites (among Latinos, 26% of women and 16% of men, and among Filipinos, 27% of women and 18% of men). Across all race-ethnic groups, women were significantly more likely to employ prayer than men, and younger adults used prayer slightly less often.

## Access to Internet, Email, and Text Messaging

### Internet and Email Access:

- In 2011, 94% of adults were able to use the Internet to search for information at their home or another location, and 92% could send and receive email — significant increases from the 86% and 85%, respectively, in 2008. The increase in Internet and email access was statistically significant across all age groups, with the largest increase among adults aged 65 and over (63% to 77%).
- Ability to use the Internet is greater among younger and middle-aged adults than among those aged 65 and over. Nearly all (99%) of those aged 20–44 and 96% of those aged 45–64 are able to use the Internet, with no significant gender difference, as compared with the 77% of those in the older age group where there is a significant gender difference (74% of women and 82% of men). However, when we look at smaller age groups within that 65 and over segment, 87% of those aged 65–74, 72% of those aged 75–79, and 56% of those aged 80 and over can use the Internet. Additionally, approximately 12% of those in the 65 and over age group (10% of those aged 65–74, 20% of those aged 75–79, and 34% of those aged 80 and over) who use the Internet require help to do so compared with 2% of those aged 20–44 and 4% of those aged 45–64.
- Internet access from home varies significantly by age. While approximately 94% of adults aged 20–44 and 90% of those aged 45–64 can use the Internet from home, only 64% of those aged 65 and over (77% of those aged 65–74, 58% of those aged 75–79, and 38% of those aged 80 and over) can do so.
- In 2011, nearly all (98%) adults who used the Internet accessed it using a desktop or laptop computer or a net book. Other devices used to access the Internet included:
  - Tablets: Used by approximately 11% of adult Internet users (15% of those aged 25-44, 9% of those aged 45–64, and 5% of those aged 65 and over).
  - Mobile phones (smart phones or cell phones): Used by approximately 39% of adult Internet users (55% of 20–44 year olds, 29% of 45–64 year olds, and 12% of those aged 65 and over).
    - Approximately 29% of adult Internet users used a smart phone to access the Internet (42% of adult users aged 25-44, 38% of women and 46% of men; 21% of adult users aged 45–64, 19% of women and 25% of men; and 7% of adult users aged 65 and over, 5% of women and 8% of men).

- About 18% of adult Internet users made access using a cell phone (25% of ages 20–44, 13% of ages 45–64, and 6% of ages 65 and over, no significant difference by gender).
- Approximately 12% of 20–44 year olds, 5% of 45–64 year olds, and 1% of those aged 65 and over indicated using both a smart and a cell phone to access the Internet.
- Ability to use email shows similar age-related differences. Nearly all (98%) of those aged 20–44, 94% of those aged 45–64, and 73% of those aged 65 and over (84% of those aged 65–74, 68% of those aged 75–79, and 53% of those aged 80 and over) can send and receive email. However, while very small percentages of those under age 65 require help to use email, 11% of those aged 65 and over (9% of those aged 65–74, 18% of those aged 75–79, and 33% of those aged 80 and over) who use email require help to do so.
- In 2008, among those aged 25–64, there was a 15% difference in ability to access the Internet between high school graduates and those with a college degree. In 2011, this gap significantly shrank (93% of those with a high school degree vs. 98% of those with some college and 99% of college graduates). However, level of education remains a significant factor among those aged 65–79 (72% of high school graduates, 87% of those with some college, and 93% of college graduates). Also, those who did not complete high school are significantly less likely to be able to use the Internet than high school graduates, even with help (78% of those aged 25–64 and 48% of those aged 75–79).
- Internet access does not significantly differ across our major race-ethnic groups among members aged 25–44 or 45–64, but there are significant differences among older members. While 86% of non-Hispanic white and 83% of Chinese adults aged 65–79 can use the Internet alone or with help, only 72% of blacks, 73% of Latinos, and 69% of Filipinos can do so, with access significantly higher among those aged 65–74 vs. ages 75–79 across all of these race-ethnic groups.

#### Text Messages:

- Nearly  $\frac{3}{4}$  (73%) of adults are able to receive text messages (83% of those with a mobile phone). However, ability to receive text messages decreases with age. Text messages can be received by 87% of those aged 20–64 (92% of those with a mobile phone), 74% of those aged 45–64 (82% of those with a mobile phone), and 35% of those aged 65 and over (52% of those with a mobile phone). In the older age group, 46% of adults aged 65–74, 27% of those aged 75–79, and 15% of those aged 80 and over can receive text messages.

## Use of Health-Related Information Resources in the Prior 12 Months

#### Use of Web-Based Resources:

- Information from Websites: Approximately one-third (32%) of adults (37% of women and 27% of men) said that they got health information from kp.org or other websites during the 12 months prior to the survey, but this differs significantly by age and gender. Thirty-four percent of 20–44 year olds (42% of women, 26% of men) and 35% of 45–64 year olds (39% of women, 29% of men) got information from a website compared with 21% of those aged 65 and over (21% of women, 22% of men). In the older group, this increases to 28% when restricted to people who report being able to use the Internet alone or with help.
- Interestingly, some adults apparently don't consider using the kp.org health information and health education tools as going to a website. When we combine those who said they got health information from a website with those who said they used a specific kp.org resource (online Health Encyclopedia or Drug Encyclopedia, online patient education program, or MD home page), the percentages of those who got health information from the Web significantly increases to overall 44% (49% of women, 38% of men) and by age group 45% of 20–44 year olds (54% of women, 36% of men), 47% of 45–64 year olds

(52% of women, 42% of men), and 33% of those aged 65 and over (33% of women, 35% of men).

- Use of kp.org Online Health Information Resources: Approximately 31% (35% of women, 27% of men) used at least one of the following kp.org health information resources: Health/Drug Encyclopedia, MD Home Page, online patient education programs). Usage of kp.org online resources varied by age group and among the younger groups, by gender: 30% of 20–44 year olds (37% of women, 23% of men), 35% of 45–64 year olds (38% of women, 31% of men), and 26% of those aged 65 and over
  - Nearly 15% of adults (17% of women, 12% of men) used the kp.org Health or Drug Encyclopedias: 13% of 20–44 year olds (17% of women, 9% of men), 18% of 45–64 year olds (20% of women, 15% of men), and 12% of those aged 65 and over (11% of women, 13% of men)
  - Approximately 21% of adults (23% of women, 19% of men) got health information from a primary care provider’s MD home page: 21% of 20–44 year olds (25% of women, 16% of men), 23% of 45–64 year olds, and 18% of those aged 65 and over.
  - Kp.org health education/patient education programs were used by 8% of adults (10% of women, 5% of men), by age groups 10%, 13%, and 6% of women and 4%, 7%, and 6% of men.
- Use of kp.org Secure Features: Nearly 60% of adults (65% of women, 53% of men) report using kp.org to send a secure message to their doctor, view lab test results, and/or refill a prescription. Adults under the age of 65 are significantly more likely to have done this than adults aged 65 and over (approximately 62% of 20–64 year olds vs. 46% of those aged 65 and over). In the under 65 age group, women are significantly more likely to have used secure features than men (72% of women vs. 49% of men aged 20–44 and 68% of women vs. 60% of men aged 45–64), whereas in the older group, men are more likely to have used secure features than women (50% of men vs. 46% of women). Of those in the older age group who are able to use the Internet, 60% (compared with 46% of all seniors) had used at least one secure feature, with no significant gender difference (59% of women, 61% of men).
- Use of any kp.org Resource: If we look at use of kp.org for health information or to use secure features, nearly two-thirds of adults (63%, 68% of women, 57% of men) had touched kp.org during the year prior to the survey. By age group, this was 64% of 20–44 year olds (75% of women, 53% of men), 67% of 45–64 year olds (70% of women, 63% of men), and 49% of those aged 65 and over (46% of women, 52% of men). Of those in the older age group who are able to use the Internet, 64% (no gender difference) had touched kp.org.

#### Non-Web-based Resources:

- Ten percent of adults (12% of women, 9% of men) participated in a Kaiser Permanente individual or group health education program, with little substantive difference across age groups or by gender.
- Five percent of adults (no gender difference) received one-on-one counseling from Kaiser Permanente to help change health-related behaviors or manage a chronic health condition.
- Approximately 9% of adults (11% of women, 6% of men) visited a Health Education Center or Health Education Resource Desk.
- About 16% of adults (16% of women and 7% of men aged 20–44, 20% of women and 14% of men aged 45–64, and 21% of men and women aged 65 and over) used print health education materials or DVDs.
- Over one-third of adults (42% of women, 29% of men) read a Kaiser Permanente member newsletter. By age group: 31% of women and 17% of men aged 20–44, 45% of women and 33% of men aged 45–64, and 58% of women and 49% of men aged 65 and over.

Any health information resource (excluding kp.org secure features)

- Altogether, 63% of adults (70% of women and 55% of men) used at least one of these web-based or more traditional health information/health education resources during the previous 12 months. Approximately two-thirds of young adult women and nearly half (46%) of young adult men sought out health-related information or health education, while nearly three-quarters (72%) of middle aged and older women and approximately 60% of middle aged and older men (50% and 66%, respectively) did so.

## Preferred Methods for Receiving Health-Related Information and Health Education

Members were asked “In addition to talking or emailing with your doctor, how would you prefer to learn about taking care of health problems and improving your health?”

- Preference for using the Internet to obtain health-related information does not differ by gender, but it does differ by age, educational attainment, and race/ethnicity.
  - Age: Among members aged 20–64, 35% prefer to obtain health information from websites as compared with 19% of those aged 65 and over (26% of 65–74 year olds, 15% of 75–79 year olds, and 9% of those aged 80-90). Among those aged 65 and over who can use the Internet, these percentages increase by age group to 30%, 20%, and 14%, respectively.
  - Education: Among members aged 25-64 and 65–79, there is a very large difference between high school graduates and college graduates regarding preference for obtaining health information from websites (ages 25-64: 13% of those who did not complete high school, 21% of high school graduates, 32% of those with some college, and 41% of college graduates; ages 65–79: 12%, 13%, 21%, and 32%, respectively).
  - Race/Ethnicity: Among those aged 25-64, interest in obtaining health information from websites is significantly higher among non-Hispanic whites, Filipinos, and Chinese than among Latinos, with a borderline-significant difference among blacks (36%, 38%, and 41% vs. 28% and 31%, respectively). Similar race-ethnic differences in preference are found among 65–79 year olds (25%, 21%, and 21% vs. 15% and 15%, respectively).
- Web/Email-Based Programs: Approximately 11% of adults aged 20–64 are interested in single-session web/email-based programs, but less (8%) are interested in multi-session web/email programs. Among those aged 65–79, 7% (9% of ages 65–74 and 3% of ages 75–79) indicated interest in single-session web/email-based programs and about 4% (4% of ages 65–74 and 2% of ages 75–79) in multi-session programs.
- Webinars and Workshops: Approximately the same percentages of adults aged 20–64 indicated interest in webinars as interest in one-session in-person health education workshops (14% and 12%, respectively). Among those aged 65–79, significantly lower percentages are interested in webinars than in-person workshops (11% vs. 5%, respectively, with 12% of ages 65–74 and only 2% of those aged 75–79 interested in webinars).
- Health Videos: A significantly higher percentage of adults aged 20–64 indicated interest in watching health videos on kp.org or other websites than DVDs (17% vs. 10%). Among those aged 65–74, nearly equal percentages (11% vs. 10%) are interested in these two modalities, but among those aged 75–79, web videos are less preferred than DVDs (6% vs. 9%). There is some overlap in preference for these video modalities, but not enough to indicate that offering only one would reach everyone (e.g., 54% of 20–64 year olds, 36% of 65–74 year olds, and 28% of 75–79 year olds who indicated interest in DVDs also indicated interest in web videos).

- Podcasts: The percentage of adults interested in podcasts is relatively low (under 10% of those aged 20–64, about 3% of those aged 65–74, and less than 1% of those aged 75–79).
- Health Messages: Significantly higher percentages of adults prefer receiving health information through secure emails than text messages (34% vs. 11%, respectively, of 20–64 year olds, 22% vs. 4% of 65–74 year olds, and 14% vs. 2% of 75–79 year olds).
- Health Newsletters: Among those aged 20–64, there was more interest in receiving health newsletters by email than by regular mail (29% vs. 14%). Among those aged 65–74, similar percentages (29% and 28%) indicated emailed and mailed newsletters, but among those aged 75–79, 37% wanted to get their newsletters by mailed vs. 19% by email. Again, there was some overlap of interest in these methods, but only offering emailed newsletters might result in not reaching a large group of adults (of those who indicated interest in getting newsletters mailed to them, 43% of 20–64 year olds, 31% of 65–74 year olds, and 19% of 75–79 year olds also indicated interest in emailed health newsletters).
- Individual Counseling: Approximately one-fourth (24%) of adults indicated interest in brief telephone counseling sessions, with no significant difference across age groups. Similar percentages were interested in in-person individual counseling (31% of 20–64 year olds, 28% of 65–74 year olds, and 21% of 75–79 year olds). Among those interested in individual counseling, 43% of 20–64 and 65–74 year olds and 39% of 75–79 year olds also were interested in the telephone-based counseling

# 2011 Member Health Survey Methods

## Data Collection

In April 2011, questionnaires were mailed to a stratified random sample of approximately 43,000 adult Health Plan members in the Northern California Region. Two subsequent survey packet mailings were sent over the next several weeks to nonrespondents, with the final wave of questionnaires mailed in mid-August. Participants were also offered the opportunity to answer a secure online version of the questionnaire reached via a link emailed to them around the time that they were expected to receive the print survey or by logging in at the URL for the Member Health Survey Participant Home Page. Phone administration was available on request but not used. Non-eligibles (deceased, non-current members, members living outside the main service area) and members for whom Kaiser Permanente nor the U.S. Postal Service had forwarding addresses were dropped from the initial sample and replaced with other randomly selected members of the same age and sex from the same medical service area population.

## Survey Sample

The survey sample was restricted to current members who had been continuously enrolled during the three months prior to the survey and for whom there was no indication that they required an interpreter or had a preference for written materials in a language other than English. Separate samples were selected from each of Kaiser Permanente Northern California Region's 19 medical center service populations. Assignment to a medical center service population is done using an algorithm based on outpatient facility where the member receives or is most likely to receive most of their primary care. Approximately 2,140 adults were sampled from each of 14 medical center service populations and 2,440 members from 5 medical center service populations with the estimated largest percentages of African-Americans and Latinos based on previous survey results. Pre-set numbers of men and women in five age groups (20-44, 45-64, 65-74, 75-79, and 80 and over) were sampled to take into account anticipated subgroup response rates and intent to oversample Medicare-age members.

## Survey Response Rates and Final Respondent Sample

The overall survey response rate among survey eligibles was 39.5% (n = 16,968/42,989). The age-gender specific response rates were as follows:

### Final Response Rates for the 2011 DOR Member Health Survey by Age-Gender Group, Members Aged 20 and Over in the Northern California Region Sample

	<u>20-44 years</u>	<u>45-64 years</u>	<u>65 years or over</u>	<u>Total</u>
Women	2888/9465 (30.5%)	2820/6208 (45.4%)	3376/4896 (69.0%)	9084/20569 (44.2%)
Men	1868/10378 (18.0%)	2661/7143 (37.3%)	3355/4899 (68.5%)	7884/22420 (35.2%)
Total	4756/19843 (24.0%)	5481/13351 (41.1%)	6731/9795 (68.7%)	16968/42,989 (39.5%)

All respondents were assigned a post-stratification weighting factor based on the age-gender distribution of the medical center service population from which they were selected as of the fourth quarter of 2010 (when the sample was pulled). The table below shows the age distributions of women, men, and all adults aged 20 and over after and before applying the post-stratification



weighting factor. The estimates of sociodemographic and health-related characteristics in this report are based on weighted survey data.

**Weighted and Unweighted Age Distributions of Men and Women in the 2011 Kaiser Permanente Northern California Member Health Survey Respondent Sample**

Age Group	Women		Men		All	
	Wtd %	(Unwtd %)	Wtd %	(Unwtd %)	Wtd %	(Unwtd %)
All 20 and Over	100	(100)	100	(100)	100	(100)
20–44 yr	42.3	(31.8)	43.4	(23.7)	42.9	(28.0)
45–64 yr	38.3	(31.0)	39.3	(33.8)	38.8	(32.3)
65 and over	19.4	(37.2)	17.3	(32.5)	18.3	(39.7)
65–74	10.4	(16.5)	10.1	(18.4)	10.2	(17.4)
75–79	3.5	(15.0)	3.2	(17.2)	3.4	(16.0)
80 or over	5.5	(5.7)	4.0	(6.9)	4.7	(6.3)

**Limitations of the Final Survey Respondent Sample**

Since the questionnaire only went out in English and very limited English-speaking members were excluded from the survey sample, non-English speaking members and members with very poor reading ability are not represented in this survey. An internal study that matched survey response status for the 2011 survey to a member race/ethnicity dataset (91% match rate for women and 84% match rate for men) found that among both women and men, non-Hispanic white, Chinese, Japanese, and Korean members were more likely to respond than African-American/other black, Latino, and Filipino members. The differential race-ethnic response rate, exclusion of non-English speakers and members with very low literacy, and lower response rates among young and middle-aged adults compared with adults aged 65 and over, yields a final weighted respondent sample that underestimates African-American/blacks and Latino/Hispanic members and overestimates some of the Asian ethnic groups. Finally, results of other surveys suggest that among older members, the very sickest and frailest are also unlikely to have responded.

**Statistical Analysis**

All percentages were calculated using the Proc Survey means procedure in PC-SAS version 9.2 for data collected using a complex survey design. Differences between percentages were considered significant at  $p < 0.05$  when the 95% confidence intervals around the percentages for two demographic subgroups did not overlap. When demographic subgroup sizes were small, resulting in large confidence intervals, Proc Survey frequency for 2 x 2 tables was used to perform chi-square analysis.