MEMBER HEALTH SURVEYS PROJECT SPECIAL REPORT:

A Comparison of Demographic, Health Status, and Behavioral/Lifestyle Risk Factor Profiles of the KPNC Adult Membership Aged 25-79 in 2008 vs. 2005

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Introduction

This summary report is based on findings from the 2008 and 2005 Member Health Surveys conducted by the KPNC Division of Research¹. The report compares selected demographics, health status indicators, and behavioral/lifestyle risk factors of the KPNC membership aged 25-79 in 2008 with similar statistics from the survey conducted in 2005. Statistics are based on respondent self-report data weighted to reflect the age, gender, and geographic composition of the adult membership at the time the surveys were conducted. Statistically significant differences were identified using SAS procedures for complex survey data². A separate report will document longer term trends in these profile factors since the Member Health Survey was first conducted in1993.

Demographic Characteristics

<u>Race/Ethnic composition</u>: In 2008, 59.8% of adult members aged 25-79 were White nonHispanic, a significant decrease from 62.2% in 2005. Compared to 2005, in 2008 there were small but statistically significant increases in the Asians (17.1% \rightarrow 18.6%) and Latinos (11.3% \rightarrow 12.3%) between these years, primarily due to changes in the composition of the 25-44 year age group (decrease in White nonHispanics from 53.3% \rightarrow 50.0% and increase in Asians from 21.7% \rightarrow 24.2%).

Educational Attainment: In 2008, 81.8% of adult members had at least some college education and 44.0% were college graduates, representing no change from 2005 (81.9% some college, 45.3% college graduate). However, some small but significant shifts toward higher educational attainment were observed within some race/ethnic groups.

Internet Access: In 2008, 90.2% of adult members had access to the Internet from home or another location, a significant increase from the 87.0% in 2005. Compared to 2005, in 2008 there were significant increases across all age groups (25-44: 93.8% \rightarrow 95.7%; 45-64: 88.3% \rightarrow 90.9%; 65-69: 71.2% \rightarrow 78.8%; 70-74: 59.5% \rightarrow 70.4%; 75-79: 48.8% \rightarrow 57.3%). In the senior age group, in both 2008 and 2005, women had significantly lower Internet access than men.

<u>Email Access</u>: In 2008, concomitant with the increase in Internet access, there was a small but significant increase in email access from 84.2% in 2005 to 87.0%. This was due to significant increases across all age groups (25-44: 90.6% \rightarrow 93.0%; 45-64: 85.7% \rightarrow 87.9%; 65-69: 67.7% \rightarrow 73.2%; 70-74: 57.6% \rightarrow 65.2%; 75-79: 48.0% \rightarrow 52.9%). Again, among seniors, in both 2008 and 2005, women had significantly lower email access than men.

¹ Member Health Surveys have been conducted every three years beginning in 1993 with funding from Kaiser Permanente Northern California's Community Benefit Program. The Member Health Surveys project provides data to look at changes in the demographics, health status, behavioral health risks, and use of selected health care services over time and to investigate disparities in these health-related characteristics in the adult membership.

² Prevalence estimates with 95% confidence intervals were generated using SAS Proc Surveymeans, producing an overall prevalence for all aged 25-79 and the domain option for producing estimates and confidence intervals for separate age-gender groups. Statistically significant differences were evaluated by examining for overlap of the 95% confidence intervals and in cases where the overlap was very small, testing for significance using logistic regression models with an indicator to compare survey year.

Selected Health Status Indicators (based on self-reported diagnosis and self-reported medication usage)

Rating of Overall Health: In 2008, 55.5% of adults considered their health to be Very Good or Excellent and 90% considered their health to be Good, Very Good, or Excellent. This represents no significant changes from in 2005 (54.2% and 89.4%, respectively). However, compared to 2005, in 2008 there were significant increases in the percentages of 65-79 year olds who reported Very Good/Excellent health (37.5% \rightarrow 41.4%) and \geq Good health (79.7% \rightarrow 82.4%).

<u>Diabetes</u>: In 2008, our estimate of 8.8% of 25-79 year old members being diabetic does not significantly differ from the 8.3% in 2005, and no significant changes were observed by age groups (25-44: $3.1\% \rightarrow 33\%$; 45-64: $10.4\% \rightarrow 11.2\%$; 65-79: $18.1\% \rightarrow 18.8\%$).

<u>High Blood Pressure</u>: In 2008, we estimate that 26.6% of adults aged 25-79 had diagnosed high blood pressure, a significant increase from the 24.3% in 2005. This was primarily due to a significant increase among 45-64 yr olds ($30.7\% \rightarrow 34.3\%$). Shifts for ages 25-44 ($7.1\% \rightarrow 8.5\%$) and 65-79 ($57.8\% \rightarrow 59.6\%$) were not statistically significant.

<u>High Cholesterol</u>: In 2008, we estimate that 22.9% of adults aged 25-79 had diagnosed high cholesterol, a significant increase from the 18.9% in 2005. Significant increases were observed for men 25-44 (7.7% \rightarrow 10.9%), women 45-64 (18.3% \rightarrow 25.4%), men 45-64 (29.9% \rightarrow 35.0%), and women 65-79 (41.5% \rightarrow 46.6%). This may be due to the trend of more aggressive identification and treatment protocols, but also to the rising rates of obesity.

<u>Musculoskeletal Pain</u>: In 2008, the percentage of adults aged 25-79 had experienced severe back, neck, or shoulder pain was 18.5%, no significant change from 18.1% in 2005. The one age-gender group that showed a significant increase was men aged 65-79 (15.1% \rightarrow 18.1%).

Health Behavior/Lifestyle Risks

Smoking: In 2008, we estimate that 9.9% of adults aged 25-79 were current cigarette smokers, defined as any smoking at all. This slight increase was not statistically significantly different from the estimate of 9.2% in 2005, and was associated with slight but not statistically significant increases among 25-44 yr old men (10.8% \rightarrow 13.0%) and women (8.2% \rightarrow 9.7%). On a more positive note, 2008 showed statistically significant decreases in current <u>daily</u> smoking (7.7% \rightarrow 6.7%) and smoking <u>daily or sometimes</u> (9.2% \rightarrow 8.0%) due to small decreases across all age groups.

<u>Obesity</u>: While in 2008 there was no significant change in the percentage of adults aged 25-79 with a <u>BMI ≥30</u> (26.5% in 2008 vs. 25.5% in 2005), there was a statistically significant increase in the percentage with a BMI ≥ 35 (9.5% \rightarrow 10.7%), with significant or near significant (p<.06) increases in <u>BMI ≥ 35</u> among women aged 25-44 (10.1% \rightarrow 12.0%) and men in all 3 age groups (25-44: 7.0% \rightarrow 8.7%; 45-64: 7.8% \rightarrow 9.9%³; 65-79: 5.7% \rightarrow 6.3%).

<u>Fruit and Vegetable Consumption</u>: In 2008, 43.1% of adults aged 25-79 reported eating at least 3 servings of fruits/vegetables a day, a statistically significant increase over 39.7% reported in 2005. This overall increase was due primarily to statistically significant increases among 22-44 year olds (women $48.3\% \rightarrow 51.6\%$, men $30.5\% \rightarrow 33.9\%$). The increase in reported consumption of at least 5 servings a day was small but also statistically significant ($11.5\% \rightarrow 12.9\%$), resulting from a significantly increased percentage among 22-44 year old men ($6.3\% \rightarrow 9.7\%$) and slight changes (approximately 1 percentage point increases) across the other age-gender groups.

³ Statistically significant increases with regard to BMI ≥35 were primarily due to substantial increases among middle-aged Black, Latino, and Filipino men.

Consumption of Reduced Fat Foods: In 2008, 47.5% of adults aged 25-79 reported that they usually tried to eat reduced fat foods, a statistically significant increase over the 40.0% reporting this in 2005. Significant increases in "reduced fat consciousness" were found among 25-44 year olds (women $34.0\% \rightarrow 43.9\%$, men $29.6\% \rightarrow 37.4\%$), and middle aged women $(44.2\% \rightarrow 56.8\%)$, but not among 65-79 year olds who historically were more likely to be trying to eat reduced fat foods (women $57.5\% \rightarrow 60.1\%$, men $52.7\% \rightarrow 53.2\%$).

<u>Calcium and Vitamin D Supplementation</u>: In 2008, 27.1% of adults aged 25-79 were taking a calcium supplement, a significant decrease from the 34.1% in 2005. Significant decreases were observed among 25-44 year old women (36.3% \rightarrow 24.3%) and men (16.4% \rightarrow 8.8%), and middle-aged women (56.6% \rightarrow 50.4%) and men (20.7% \rightarrow 14.0%). Most (>75%) of the people taking calcium in 2008 were taking a supplement that included Vitamin D.

Because of the newsworthiness of <u>Vitamin D supplementation</u>, we estimated the percentage of adult members who were likely getting <u>close to adequate amounts of vitamin D from dietary supplements</u> (defined as person taking a vitamin D supplement + taking calcium with D, a vitamin D supplement + a multivitamin, or calcium with D + a multivitamin). Less than 20% of 25-79 year olds (17.8%) were getting adequate vitamin D, and vitamin D supplementation varied significantly by age and gender, with women aged 45-64 and 65-79 having the highest percentages (34.0% and 39.7%, respectively), men aged 25-44 and 45-64 having the lowest percentages (4.8% and 8.7%, respectively), and women aged 25-44 and men aged 65-79 falling in between these ranges (16.3% and 13.8%, respectively). Percentages assumed to be getting <u>no vitamin D supplementation</u> (based on non-use of multivitamins, calcium with D, or vitamin D supplements) in 2008 were for ages 25-44: women 41.2%, men 53.6%; ages 45-64: women 30.1%, men 50.5%; ages 65-79: women 26.5%, men 43.0%.

<u>Exercise Frequency</u>: In 2008, approximately 16.4% of adults aged 25-79 were sedentary (routinely getting exercise less than once a week), not significantly different from the 16.8% in 2005. However, there was a small but statistically significant drop in sedentary behavior among women aged 65-79 (17.5% \rightarrow 15.1%). There was also no significant change in the overall percentage of adults who were getting exercise at least 3 times a week (58.2% \rightarrow 59.4%), although exercise at this frequency was significantly higher in 2008 among men aged 65-79 (71.6% \rightarrow 74.5%).

<u>Alcohol Consumption</u>: In 2008, approximately ¼ (25.8%) of adults aged 25-79 were drinking alcoholic beverages at a level considered above moderate drinking (i.e., women: >1 drink/day or >7 drinks/week; men >2 drinks/day or >14 drinks/week), no significant change from the 25.4% in 2005. No significant changes were observed by age-gender group.

<u>Depression and At-Risk Emotional Health</u>: In 2008, 12.8% of adults reported having felt depressed for at least 2 weeks during the previous year or taking antidepressant medication. This represents no significant change from 12.6% in 2005. In both years, across age groups, women were more likely to report depression than men, and middle-aged women reported the highest rates of depression. Our estimates of adults who experienced a depressive episode or were on anti-depressants in 2008 were for ages 25-44: women 15.5%, men 7.7%; ages 45-64: women 18.9%, men 9.9%; ages 65-79: women 13.6%, men 8.2%. A new composite indicator, At-risk Emotional Health⁴, which has a much higher prevalence than depression, also remained stable at 28.5% (vs. 27.7% in 2005). As with depression, women were significantly more likely than men to be characterized as At-risk Emotional Health across all age groups. In 2008, our estimates for at-risk emotional health were for ages 25-44:

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⁴ At-risk Emotional Health was defined as having indicated one or more of the following: Experiencing depression or very low spirits for at least 2 straight weeks or taking antidepressants; having anxiety/panic lasting at least 2 straight weeks or taking anti-anxiety medications; having a drug or alcohol problem; having felt very stressed, tense, or anxious most of the time during the past 12 months; fair or poor emotional health; reporting at least moderate impairment of work or other regular activities due to emotional/mental health problems, or feeling very dissatisfied with life in general.

women 32.1%, men 25.4%; ages 45-64: women 32.5%, men 26.0%; ages 65-79: women 27.7%, men 21.4%.

<u>Sleep Problems</u>: In 2008, 10.8% of adults aged 25-79 reported frequent problems with sleep and 11.5% reported taking prescription or OTC medicines for sleep, no significant change from in 2005 (11.4% sleep problems and 12.5% sleep medicines).

<u>Chronic Stress</u>: In 2008, 18.1% of adults aged 25-79 said that they had felt very stressed, tense, or anxious much of the time during the previous 12 months, a small but statistically significant increase over 16.5% in 2005. This increase was primarily due to significant increases in chronic stress among 25-44 year olds (women: $26.1\% \rightarrow 28.7\%$; men: $15.6\% \rightarrow 18.1\%$). With regard to some specific sources of stress:

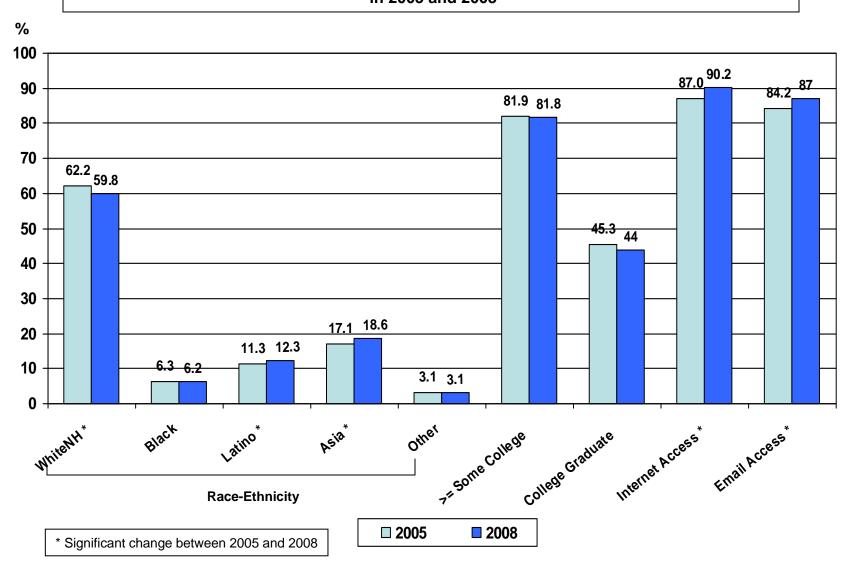
- <u>Financial Security</u>: The percentages of adults reporting that they had been very worried about their own or their family's financial security during the past 12 months significantly increased from 26.8% to 29.9%. Statistically significant increases occurred for women 25-44 (37.6% → 40.2%), women 45-64 (27.2% → 33.0%) and men 45-64 (21.1% →25.7%). In both 2008 and 2005, young adult and middle aged women report being stressed about financial security more often than similarly aged men.
- Neighborhood Violence: There was a small but statistically significant shift in the percentage of adults reporting that they were very worried about neighborhood violence $(6.3\% \rightarrow 7.1\%)$, with the only age-specific increase being among women 25-44 $(7.8\% \rightarrow 9.9\%)$.

Beliefs about Relationship of Behaviors, Emotions, and Health: In 2008, 83.4% of adults aged 25-79 believed that habits/lifestyle (like diet, exercise, and weight) could affect their health quite a bit, unchanged from the 83.7% in 2005. The percentage who believed that stress and emotional troubles (such as depression and anxiety) could affect their health quite a bit also didn't change (79.4% in 2008 vs. 80.4% in 2005). The belief that health-related habits can have a large effect on health continued to show a similar strong education-related gradient (73.4% of high school graduates, 83.9% of those with some college, and 88.4% of college graduates). In 2008, approximately 12% of those who have no education beyond high school believed that health behaviors and lifestyle have little or no impact on health as compared with 3% of college graduates.

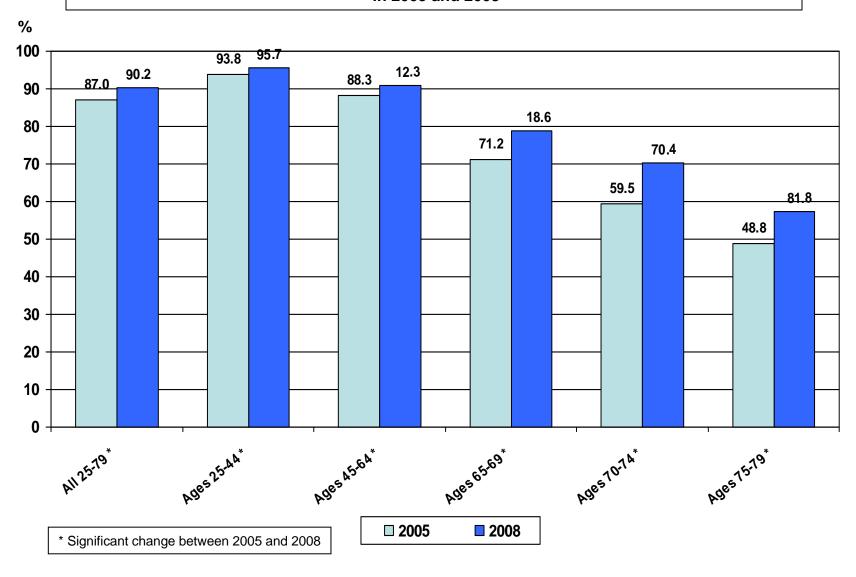
Conclusions

The 2008 Member Health Survey shows that the 25-79 year old KP adult membership continued the trend toward greater race-ethnic diversity, primarily due to changes in the composition of the younger adult group. The lack of change in prevalence of diabetes and the increases in high blood pressure and high cholesterol parallel patterns seen in the general population. Positive changes were seen on the two dietary behaviors tracked by the survey (increased percentages of members eating at least 3 servings of fruits and vegetables per day and trying to eat reduced fat foods). However, calcium supplementation was down from 2005 levels, and Vitamin D supplementation was occurring at a relatively low rate. (Note: the 2008 survey was conducted prior to all the media attention about Vitamin D deficiency.) The 2008 survey did not find significant improvements regarding exercise frequency and cigarette smoking, although there seems to be some indication that fewer current smokers are smoking daily. While obesity (BMI ≥ 30) has not increased, the percentages of adults who are seriously obese (BMI ≥35) showed a small but significant increase, suggesting that gradation of obesity (≥35, ≥40) should be tracked in addition to those meeting the general criteria for obesity (BMI ≥ 30). The new At-risk Emotional Health indicator suggests that the percentage of members who are experiencing emotional difficulties is much higher than indicators of depression may suggest (approximately 1/4 of all adults and 1/3 of 25-64 year old women experienced emotional difficulties in 2008). The surveys also show that while over 80% of adults have accepted the relationship of health behaviors/lifestyle and health, this percentage hasn't been increasing and still shows marked educational disparity.

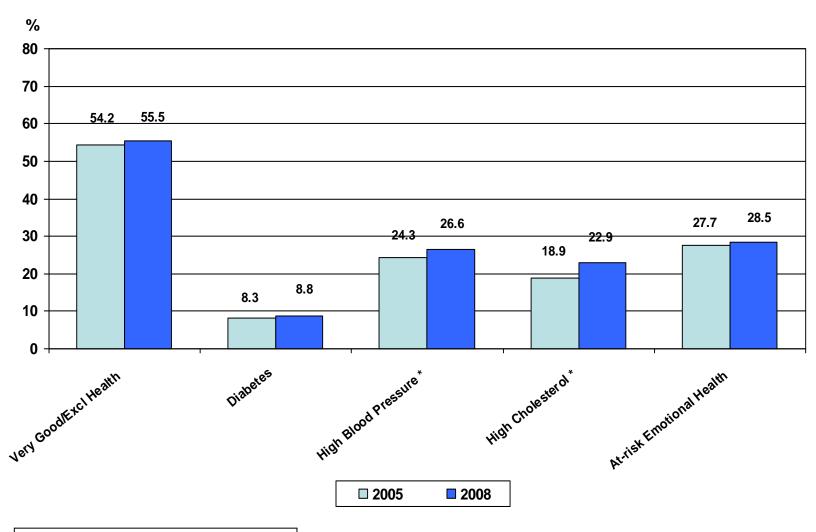
Demographic and Internet Access Characteristics of the KPNC Membership Aged 25-79 in 2005 and 2008



Percentages of KPNC Adults Aged 25-79 with Internet Access, By Age-Gender Group in 2005 and 2008



Health Characteristics of Adult KPNC Members Aged 25-79 in 2005 and 2008



^{*} Significant change between 2005 and 2008

