Social Determinants of Health and Social Risk Prevalence in the Kaiser Permanente Northern California Adult Membership in 2017: Results from the 2017 KPNC Member Health Survey

Nancy P. Gordon, ScD
Member Health Survey Director
Kaiser Permanente Northern California Division of Research
September 8, 2020

Social determinants of health (SDoHs) and social risks (SRs) have been associated with adverse health and healthcare utilization and racial/ethnic disparities. However, there is limited information about the prevalence of SRs in primarily non-"safety net" adult health plan populations like Kaiser Permanente Northern California (KPNC) and how social risks differ by race/ethnicity, age, and sex. This brief report based on analysis of member-reported data from the 2017 KPNC Member Health Survey provides some information about the life circumstances of our adult membership prior to the COVID-19 pandemic.

What is the KPNC Member Health Survey?

The Member Health Survey is a self-administered (print and online) survey that has been conducted every 3 years since 1993 with stratified random samples of adults who are current members of the Kaiser Permanente Medical Care Program in Northern California and are able to answer an English-language questionnaire. 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 Surveys project is funded by Kaiser Permanente's Northern California Community Benefit (CB) Program through a direct allocation to the Division of Research. Reports and statistics based on previous surveys, survey questionnaires, and more information about survey methodology in prior cycles can be found at www.memberhealthsurvey.kaiser.org.

2017 Member Health Survey sample

The MHS2017 sample was an age-sex stratified random sample of White, African-American/Black, Latinx, and Asian adults who were identified from a 2016 Demographically Enriched Cohort of Kaiser Adults (DECKA2016) race/ethnicity study cohort (N= approximately 2.5 million members). After eliminating adults whose preferred spoken and written language in the electronic health record was not English (since the survey materials were only created in English) from this cohort, we randomly selected set numbers of men and women in 4 age groups (25-44, 45-64, 65-74, 75-90) for each race/ethnic group for the starting survey sample. Some re-assignment of respondents to race/ethnic groups was done based on self-reported race/ethnicity ascertained from the survey. Survey respondents were assigned weighting factors derived from the DECKA2016 cohort so that estimates based on weighted survey data would reflect the age-sex-racial/ethnic composition of the adult KPNC membership in calendar year 2016. More about the methodology used for the 2017 Member Health Survey (MHS2017), including response rates and an overview of the changes to the sampling strategy and creation of survey respondent weighting factors to optimize the survey data for studying racial/ethnic differences, can be found in **Appendix 1** at the end of this brief report. Also found in the Appendix 1 are the final counts of men and women of White, African-American/Black, Latinx, Asian, and Other race/ethnicity in the final respondent sample, prior to weighting.

How to cite this report: Gordon NP. Social determinants of health and social risk prevalence in the Kaiser Permanente Northern California Adult Membership in 2017: Results from the 2017 KPNC Member Health Survey. Kaiser Permanente Division of Research, Oakland, CA, September 8, 2020.

Social determinants/social risk variables included in the MHS2017

The sociodemographic and social risk variables included in the MHS2017 are shown in **Table 1**. In addition to race/ethnicity, sex, and age group, which were used to define our study groups, the social determinants fell into X main domains: sociodemographic (educational attainment and household income), financial strains, and non-financial social risks. The exact wording of the questions and responses is found in **Appendix 2**. For context, in the San Francisco Bay Area, a household income of < $35,000 is considered to be lower income and qualifies a single adult for low-income housing, and a household income of $65,000 is considered to be toward the bottom end of middle-class.

Table 1. Sociodemographic and social risk variables included in the 2017 Member Health Survey

Sociodemographic characteristics (Tables 1a-1d)
- Educational Attainment: ≤ High school graduate, College graduate
- Household income in 2016: < $25,000, < $35,000, > $65,000, > $150,000

Financial strains experienced in past 12 months (Tables 2a-2d)
- General: Had difficulty "making ends meet" at the end of a month; had worried a great deal about own/family's financial security
- Food-related: Had worried that food might run out before had money to buy more; because of cost, had eaten less fruits and vegetables than wanted to (proxy for affordability of healthy food)
- Health care-related: Had worried about ability to pay for medical expenses; had delayed or did not get needed medical care due to cost; had reduced or did not use a prescription medicine due to cost; had delayed or did not get needed dental care due to cost

Non-financial risks experienced in past 12 months (Tables 3a-3d)
- Had worried about own/family's safety due to neighborhood violence, robberies, etc.
- Felt harassed or discriminated against
- Was physically or emotionally hurt or felt threatened by a current/former partner or someone else
- Felt very stressed, tense, or anxious much of the time
- Has felt dissatisfied with their life
- Was an unpaid caregiver to a relative or friend who was seriously ill or had a disability

Health-related beliefs (Tables 4a-4d)
- Believes that habits/lifestyle like exercise, diet, and weight can have a large effect or have little/no effect on their health
- Believes that stress and emotional troubles like depression or anxiety can have a large effect or have little/no effect on their health

Data Analysis Strategy and Overview of Report Tables

All prevalence estimates are based on respondent data weighted to the age-sex-race/ethnic composition of the KPNC adult membership. Prevalence estimates are presented for ages 25-64 yr (Non-Seniors) and 65-90 yr (Seniors) by sex (Tables 3a-6a); for Non-Seniors and Seniors by race/ethnicity, restricted to White, Black, Latinx, and Asian (Table 3b-6b); and by race/ethnicity and sex separately for Non-Seniors and Seniors (Tables 3c-6c and 3d-6d). Because as Table 1 shows, the counts of men and women in the race/ethnic group x age group x sex subgroups are relatively small, these point estimates have wide confidence intervals around them. Logistic regression models were used to assess whether differences between age groups, sexes, and race/ethnic groups were statistically significant after controlling for the other demographic factors. In models that controlled for age, we used age as a continuous variable; in other instances, as noted in the tables and text, we compared the Non-Senior and Senior age group or ages 25-44 (younger adults) and ages 65-90 to ages 45-64 (middle-aged adults). In all models that controlled for race/ethnicity or compared race/ethnic groups, we used indicator variables for Black, Latinx, Asian, and Other, with White non-Hispanics serving as the reference group. For analyses that controlled for or compared on sex, we used sex indicated in the respondent's EHR, with men serving as the reference group[1]. In the text, any references to a group being more or less likely to have a

---

[1] Of the 5005 respondents, only 8 (3 indicated as male in the EHR and 5 indicated as female in the EHR) indicated a different gender in the survey (Males: 1 TGM, 1 TGF, 1 Other; Females: 3 TGM, 2 Other).

characteristic were statistically significant at a minimum of *P*<.05 after adjusting for the other demographic variables.

Results

The Member Health Survey results suggest that in 2017 when the survey was conducted, there were significant age- and race/ethnic-related disparities in education, income, and financial and other social risks to health. Overall, while Non-Seniors were less likely than Seniors to have a household income of < $35,000, they were significantly more likely than Seniors to report having had financial strains, including difficulty "making ends meet", worry about ability to pay for food and medical expenses, and worry about their and their family's financial security. Non-Seniors were more likely than Seniors to have delayed or not gone for medical care they thought they needed and to have eaten less fruits and vegetables than they would have (our proxy for healthy food) due to the cost. Non-seniors were also more likely than Seniors to report being worried about their personal and family's safety due to neighborhood crime, to have felt harassed or discriminated, to experience chronic high stress, and to be dissatisfied with their life.

As a group, Black and Latinx adults in both the 25-64 and 65-90 age groups were less likely than similarly aged Whites to have a 4-year college degree and more likely to be part of a lower income household. In both age groups, Black and Latina women were more likely than their male counterparts to have a lower household income, despite being more likely to have a 4-year college degree. In both age groups, Blacks were consistently more likely than Whites to report that in the past year they had difficulties "making ends meet", were food insecure, had reduced prescription medication use due to cost, had delayed or not gone for needed dental care due to cost, and had been very worried about their financial situation. Blacks were also more likely than Whites in both age groups to have experienced harassment or discrimination, to have experienced physical or emotional hurt or threats from someone, and to feel dissatisfied with their life.

A more detailed summary of the results follows. The tables are found at the end.

Sociodemographic determinants of health (Tables 2a-d)

- Educational attainment:
  - o Table 2a shows that in the Non-Senior group, women were less likely than men to have no formal post-secondary education but equally likely to be college graduates; in the Senior group, women were more likely than men to have no formal post-secondary education and less likely to be college graduates. Overall, Non-Seniors were more likely to be college graduates than Seniors, but the difference between age groups was much larger among women than men.
  - o Table 2b shows that in both the Non-Senior and Senior age groups, Blacks and Latinxs were more likely than Whites to have no formal post-secondary education and less likely to be college graduates. Table 2c, however, shows that in the Non-Senior group, the difference between Blacks and Whites with regard to no post-secondary education was only found among men. In the Non-Senior age group, Asians were more likely than Whites to have post-secondary education and to be college graduates, but did not differ from Whites in the Senior age group.

- Household income (HHI):
  - o Table 2a shows that in both age groups, women were more likely than men to be part of a lower income household and less likely to be in a household with income > $65,000. In the younger age group, women were less likely than men to have an HHI > $150,000, which is still considered middle-class in many Bay Area cities, especially for a family.
  - o Table 2b shows that in both age groups, Blacks and Latinxs were more likely than Whites to live in lower income households, less likely to have an HHI > $65,000, and less likely to have an HHI >$150,000. In the Non-Senior age group, Asians were less likely than Whites to live in lower income households, equally likely to have an HHI > $65,00, and more likely to have an HHI > $150,000. However, the situation is different in the Senior age group, with Asians more likely than Whites to be in a lower income household, less likely to have an HHI > $65,000, and equally likely to have an HHI

> $150,000. Table 2c shows that in the Non-Senior group, similar patterns of race/ethnic differences in HHI were observed for men and women. However, in the Senior group, there was a larger HHI disparity between Blacks and Latinxs and Whites among women than was seen among men (Table 3d).

Financial strains in the prior 12 months (Tables 3a-d)

- Table 3a shows that 28% of adults aged 25-90 experienced at least one type of financial strain in the previous 12 months. Non-Seniors were more likely to have experienced financial strain than Seniors (30% vs. 21%, respectively), and our analysis showed that within that Non-Senior age group, younger adults (ages 25-44) were more likely to have indicated one or more sources of financial strain than middle-aged (ages 45-64) adults. When this was expanded to include being very worried about personal or family financial situation, the percentage of all adults who experienced financial strain increased to 37% (40% of Non-Seniors and 26% of Seniors). Within the two age groups, men and women were similar in regard to prevalence of financial strains.
  - 11% of adults (approximately 13% of Non-Seniors and 5% of Seniors) had trouble "making ends meet" during at least one month last year
  - 3% of adults (4% of Non-Seniors and 1% of Seniors) had worried that their food might run out before they had money to buy more, but about 8% of Non-Seniors and 3% of Seniors (about 7% overall) said that they had eaten less fruits and vegetables than they would have due to cost, which suggests that twice as many people may be food insecure in terms of maintaining a healthy diet.
  - About 8% of adults (about 9% of Non-Seniors and 5% of Seniors) had worried about their ability to pay for medical expenses, and 9% of Non-Seniors and about 3% of Seniors said that they had delayed or skipped getting needed medical care because of the cost.
  - 17% of adults (17% of Non-Seniors and about 16% of Seniors) said that they had delayed or skipped needed dental care in the past year because of the cost.
  - 23% of adults (27% of Non-Seniors and 12% of Seniors) had worried a great deal about their personal or their family's financial situation.
- Table 3b shows that across all race/ethnic groups, Non-seniors are more likely than Seniors to report having difficulties "making ends meet", to be food insecure, and to be very worried about their financial situation. in both age groups, Blacks and Latinxs were more likely than Whites to have experienced at least one type of financial strain and to have been very worried about their or their family's financial situation.
  - In both age groups, twice as many Blacks as Whites reported having had difficulty "making ends meet." Blacks were also much more likely than Whites to have worried that they wouldn't have enough money for food.
  - In the Senior group, Blacks were more likely than Whites to have worried about their ability to pay for medical expenses and to report having delayed or skipped needed medical care.
  - In both age groups, Blacks were more likely than Whites to say they had reduced/not used prescription medicine due to the cost and to have delayed or skipped needed dental care due to the cost.

Non-financial social risks/stressors in previous 12 months (Tables 4a-d)
- Table 4a shows that with the exception of being an unpaid caregiver for a friend or relative who was seriously ill or had a physical, developmental, mental, or emotional disability (approximately 22% of both age groups), Non-Seniors were more likely than Seniors to have experienced the non-financial social risks we studied. Specifically, in the past year:
  - 7% of adults (8% of Non-Seniors and 4% of Seniors) worried about their or their family's safety due to neighborhood violence.
  - Approximately 7% of adults (about 8% of Non-Seniors and 3% of Seniors) experienced at least one episode of harassment or discrimination.

- o Approximately 6% of adults (about 6% of Non-Seniors and 4% of Seniors) had been physically or emotionally hurt or felt threatened by someone they knew
- o 18% of adults (21% of Non-Seniors and 8% of Seniors) had felt very stressed, tense, or anxious much of the time. Adults aged 25-44 more likely to be stressed than middle-aged adults.
- o Approximately 9% of adults (about 10% of Non-Seniors and 5% of Seniors) felt dissatisfied with their life.
- Table 4b shows that in both age groups, Blacks were more likely than Whites to report that in the prior 12 months, they had experienced harassment or discrimination, had been physically or emotionally hurt or threatened, and were dissatisfied with their life, and in the Senior group, Blacks were more likely than Whites to have worried about their personal or family's safety due to neighborhood violence.
  - o In the Non-Senior group, 15% of Blacks and 9% of Latinxs had experienced harassment or discrimination, as compared to approximately 6% of White and 8% of Asian adults, in the Senior, 8% of Blacks as compared to less than 4% of all other race/ethnic groups indicated this.
  - o 9.4% of Blacks in the Non-Senior group and 6.4% of Blacks in the Senior group had been physically or emotionally hurt or felt threatened, as compared to 6% and 4% respectively, of Whites.
  - o 16.1% of Blacks in the Non-Senior group and 9% of Blacks in the Senior group felt dissatisfied with their life, as compared to 11% and 5% of Whites, respectively, in these age groups. In the Non-Senior group, Latinxs and Asians were less likely than Whites to be dissatisfied with their life.
  - o Worry about personal/family safety due to neighborhood violence did not differ by race/ethnicity in the Non-Senior group, but in the Senior group, Latinxs were more likely than Whites to be worried about this.
  - o In both age groups, Asians were less likely than the other racial/ethnic groups to report chronic high levels of stress.

Health-related beliefs (Tables 5a-d)

- Table 5a shows that in the Non-Senior group, women were more likely than men to believe that health habits/lifestyle and stress and emotional troubles could have a large effect on their health and less likely to believe that health habits/lifestyle and stress/emotional troubles would have little or no effect on their health. A similar pattern was seen in the Senior group except that the difference between men and women with regard to health habits/lifestyle having a large effect on health was not statistically significant.
- Table 5b shows that after controlling for sex, there were significant race/ethnic differences within age groups.
  - o In both age groups, Blacks, Latinxs, and Asians were less likely than Whites to believe that their health habits/lifestyle can have a large effect on their health and more likely to believe that these have little or no effect on their health.
  - o In both age groups, Latinxs and Asians were less likely than Whites to believe that stress/emotional troubles can have a large effect on their health. Conversely, Blacks, Latinxs, and Asians were more likely than Whites to believe that stress/emotional troubles have little or no effect on their health.
  - o Blacks, Latinxs, and Asians in the Senior group were less likely than those in the Non-Senior group to believe that their health habits/lifestyle and stress/emotional troubles could have a large effect on their health and more likely to believe that these have little or no effect on their health. Whites in the Senior group were less likely than Non-Senior Whites to believe that stress/emotional troubles have a large effect on health and more likely to believe that emotional troubles have little or no effect on health, but did not significantly differ by age with regard to health habits/lifestyle. Tables 5c and 5d show that these age group differences within race/ethnic groups are also observed when examined separately by sex.

Conclusions

Analysis of member-reported data from the 2017 KPNC Member Health Survey showed significant age group and racial/ethnic differences in social determinants of health and social risks in our adult membership. Overall, Non-Seniors were more likely than Seniors to have experienced financial strain or to be very worried about their financial situation, despite a higher percentage of Seniors having a low household income. Non-Seniors were also more likely than Seniors to have experienced non-financial social risks in the past year, to be very stressed, and to be dissatisfied with their life. Blacks were more likely than Whites to have experienced financial strain or to be very worried about their financial situation, to have experienced harassment/discrimination or physical/emotional violence or threat of violence in the prior year, and to be dissatisfied with their life, sequelae of racial/ethnic inequalities in U.S. society. While adults with social risks may be more likely to have actionable social needs than those in better circumstances, the prevalence of social risks should not be equated with prevalence of social needs or percentages of adults who would want help from Kaiser Permanente to improve their social circumstances. However, adult health plan members with social risks may face more barriers to covering medical-related costs, obtaining healthy foods, and living and working in a health-conducive environment, which can lead to poorer health and well-being.

Table 2a. Educational attainment and household income, by age group and gender, 2017

	25-46 yr			65-90 yr			25-90 yr
	Men	Women	All	Men	Women	All	All
≤ High school graduate	16.9%	12.5% [b]	14.6%	20.4%	27.8% [b]	24.5%	16.9% [d]
College graduate	55.7%	54.6%	55.1%	50.5%	37.9% [a]	43.6%	52.5% [e]
HH income < $25,000	5.9%	7.8%	6.9%	10.3%	16.3%	13.6%	8.4%
HH income < $35,000	9.5%	12.7% [c]	11.2%	18.6%	26.4% [b]	22.8%	13.8%
HH income > $65,000	65.3%	57.9% [c]	61.3%	47.2%	36.0% [a]	41.1%	56.8%
HH income > $150,000	27.0%	22.1% [b]	24.4%	11.5%	8.0%	9.6%	21.1%

[a] Sex difference within age group significant at P <.001 after controlling for age and race/ethnicity
[b] Sex difference within age group significant at P < .01 after controlling for age and race/ethnicity
[c] Sex difference within age group significant at P < .05 after controlling for age and race/ethnicity
[d] After controlling for gender and race/ethnicity, adults aged 25-44 are less likely (P<.001) and adults aged 65-90 are more likely (P<.001) than adults aged 45-64 to have no post-secondary education.
[e] After controlling for gender and race/ethnicity, adults aged 25-44 are more likely (P<.001) and adults aged 65-90 are less likely (P<.01) than adults aged 45-64 to be college graduates.

Table 2b. Educational attainment and household income, by age group and race/ethnicity, 2017

	25-64 yr				65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
≤ High school graduate	12.5%	20.4% [a]	28.6% [a]	7.4% [b]	21.8% [d]	30.9% [b,d]	49.7% [a,d]	20.9% [d]
College graduate	56.8%	39.3% [a]	36.9% [a]	70.0% [a]	45.7% [d]	30.4% [a,d]	21.0% [a,d]	53.6% [d]
HH income < $25,000	6.9%	13.7% [a]	6.7%	3.7% [b]	11.6% [d]	16.8% [c]	21.1% [a,d]	17.2% [b,d]
HH income < $35,000	10.1%	19.8% [a]	14.3% [c]	6.1% [b]	20.0% [d]	31.0% [a,d]	32.4% [a,d]	26.9% [b,d]
HH income > $65,000	66.1%	46.8% [a]	46.3% [a]	67.7%	45.7% [d]	23.8% [a,d]	23.2% [a,d]	36.5% [b,d]
HH income > $150,000	25.7%	12.9% [a]	14.1% [a]	34.1% [a]	10.2% [d]	4.3% [b,d]	4.2% [b,d]	10.2% [d]

[a] Within age group, significantly (P<.001) different from White after controlling for age and sex
[b] Within age group, significantly (P<.01) different from White after controlling for age and sex
[c] Within age group, significantly (P<.05) different from White after controlling for age and sex
[d] Within race/ethnic group, significantly (P<.05) different from Non-Seniors after controlling for sex.

Table 2c. Educational attainment and household income, by gender and race/ethnicity, ages 25-64, 2017

	Men 25-64				Women 25-64			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
≤ High school graduate	14.1%	27.4% [a]	34.1% [a]	8.7% [a]	11.1%	15.1% [d]	23.9% [a,d]	6.3% [c]
College graduate	59.0%	36.1% [a]	34.3% [a]	67.6% [c]	54.8%	41.7% [a,d]	39.0% [a,d]	72.1% [a]
HH income < $25,000	5.8%	11.4% [b]	6.5%	4.2%	7.8%	15.4% [b]	6.9%	3.2% [c]
HH income < $35,000	8.7%	17.0% [b]	12.8%	5.6%	11.5%	22.0% [a]	15.7%	6.6%
HH income > $65,000	70.0%	53.5% [a]	52.0% [a]	68.5%	62.4% [d]	41.6% [a,d]	41.3% [a,d]	67.0%
HH income > $150,000	29.7%	14.6% [a]	15.6% [a]	34.5%	22.0% [d]	11.6% [a]	12.9% [b]	33.8% [a]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Table 2d. Educational attainment and household income, by gender and race/ethnicity, ages 65-90, 2017

	Men 65-90				Women 65-90			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
≤ High school graduate	18.8%	28.9% [c]	40.3% [a]	13.1%	24.2%	32.4% [c,d]	57.3% [a,d]	27.8% [d]
College graduate	53.2%	34.6% [a]	26.9% [a]	60.8%	39.5%	27.4% [b]	16.2% [a,d]	47.4% [d]
HH income < $25,000	8.6%	12.0%	11.8%	17.2% [b]	14.1% [d]	20.4%	28.7% [c,d]	17.2%
HH income < $35,000	15.7%	21.0%	21.9%	29.6% [a]	23.6% [d]	38.5% [a,d]	40.9% [a,d]	24.5%
HH income > $65,000	51.5%	34.3% [b]	32.0% [a]	38.6% [b]	40.7% [d]	15.9% [a,d]	16.0% [a,d]	34.6% [b]
HH income > $150,000	12.0%	7.9%	4.0% [c]	14.7%	8.7%	1.7% [c,d]	4.3%	6.1% [d]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Table 3a. Financial strains experienced during the previous 12 months, by age group and gender, 2017

In the past 12 months:	25-64 yr			65-90 yr			25-90 yr
	Men	Women	All	Men	Women	All	All
Had difficulty "making ends meet" at the end of a month	10.9%	14.6% [b]	12.9%	5.0%	5.8%	5.4%	11.2% [d]
Worried that food might run out before had money to buy more	4.0%	4.2%	4.1%	1.0%	1.0%	1.0%	3.4% [e]
Worried about ability to pay for medical expenses	8.7%	8.5%	8.6%	5.9%	5.9%	5.1%	7.9% [f]
Worried a great deal about own/family's financial security	25.4%	27.9%	26.8%	11.1%	12.6%	11.9	23.3% [g]
Because of the cost:							
Delayed/did not get needed medical care	8.3%	10.1%	9.3%	3.0%	2.4%	2.7%	7.8% [h]
Reduced/did not use an Rx medicine	3.6%	3.8%	3.7%	2.9%	2.4%	2.6%	3.5%
Delayed/did not get needed dental care	16.5%	18.0%	17.3%	14.9%	16.0%	15.5%	16.9%
Ate less fruits and vegetables than wanted	6.5%	8.9% [c]	7.8%	2.5%	2.7%	2.6%	6.6% [i]
Experienced financial strains in past 12 mos.*	28.7%	31.6%	30.2%	19.6%	21.5%	20.7%	28.0% [j]
Experienced financial strains* and/or was worried about financial security	38.9%	41.7%	40.4%	24.6%	27.0%	25.9%	37.1% [k]

[a] Sex difference within age group significant at P <.001 after controlling for age and race/ethnicity

[b] Sex difference within age group significant at P < .01 after controlling for age and race/ethnicity

[c] Sex difference within age group significant at P < .05 after controlling for age and race/ethnicity

[d] After controlling for gender and race/ethnicity, adults aged 25-44 were less likely (P<.05) and adults aged 65-90 more likely (P<.001) than adults aged 45-64 to have had difficulty making ends meet.

[e] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.01) and adults aged 65-90 less likely (P<.001) than adults aged 45-64 to have been food insecure.

[f] After controlling for gender and race/ethnicity, adults aged 65-90 were less likely (P<.001) than adults aged 45- 64 to have worried about ability to pay for medical expenses; no significant difference for ages 25-44 vs. 45-64.

[g] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.001) and adults aged 65-90 less likely (P<.001) than adults aged 45-64 to have worried a great deal about financial security.

[h] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.001) than adults aged 45-64 to have delayed or skipped medical care due to cost; adults aged 65-90 did not significantly differ from those aged 45-64.

[i] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.001) and adults aged 65-90 less likely (P<.01) than adults aged 45-64 to say that they ate less fruits/vegetables than wanted due to cost.

[j] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.01) and adults aged 65-90 less likely (P<.001) than adults aged 45-64 to have experienced at least one of these financial strains.

[k] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.001) and adults aged 65-90 less likely (P<.001) than adults aged 45-64 to have experienced at least one of these financial strains or to have been very worried about their/their family's financial situation.

* In past 12 months, worried about having enough money for food, worried about having enough money to pay for medical expenses, had difficulty "making ends meet", delayed/did not get medical care or dental care due to cost, reduced prescription medication use due to cost, ate less fruits and vegetables due to cost

Table 3b. Financial strains experienced during the previous 12 months, by age group and race/ethnicity, 2017

In the past 12 months:	25-64 yr				65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Had difficulty "making ends meet" at the end of a month	12.5%	21.2% [a]	15.9%	7.1% [a]	5.2% [d]	10.8% [b,d]	7.9% [d]	2.1% [c,d]
Worried that food might run out before had money to buy more	3.5%	10.3% [a]	5.6%	2.3%	0.5% [d]	4.9% [a,d]	2.2% [c,d]	0.4% [d]
Worried about ability to pay for medical expenses	9.4%	8.4%	11.1%	4.6% [a]	4.9% [d]	9.4% [b]	7.4%	5.1%
Worried a great deal about own/family's financial security	26.3%	33.2% [b]	31.0%	23.4%	11.4% [d]	17.5% [c,d]	13.1% [d]	10.5% [d]
Because of the cost:								
Delayed/did not get needed medical care	10.4%	8.1%	10.8%	6.3% [b]	2.2% [d]	7.1% [a]	3.9% [d]	1.8% [d]
Reduced/did not use an Rx medicine	3.7%	6.4% [c]	4.4%	2.1%	2.0%	5.4% [c]	3.1%	3.3%
Delayed/did not get needed dental care	17.7%	22.1% [c]	19.9%	11.9% [b]	13.9%	26.3% [a]	24.4% [a]	10.3%
Ate less fruits and vegetables than wanted	7.5%	12.4% [b]	10.8%	5.1% [c]	2.0% [d]	7.4% [a,d]	6.2% [b,d]	1.2% [d]
Experienced financial strains in past 12 mos.*	29.6%	41.4% [a]	35.6% [c]	22.1% [a]	18.8% [d]	34.4% [a,d]	29.2% [a,d]	16.2% [d]
Experienced financial strains* and/ or was worried about financial security	38.9%	51.9% [a]	46.8% [c]	33.7% [b]	24.1% [d]	38.3% [a,d]	34.9% [b,d]	21.9% [d]

[a] Within age group, significantly (P<.001) different from White after controlling for age and sex
[b] Within age group, significantly (P<.01) different from White after controlling for age and sex
[c] Within age group, significantly (P<.05) different from White after controlling for age and sex
[d] Within race/ethnic group, significantly (P<.05) different from Non-Seniors after controlling for sex.
* In past 12 months, worried about having enough money for food, worried about having enough money to pay for medical expenses, had difficulty "making ends meet", delayed/did not get medical care or dental care due to cost, reduced prescription medication use due to cost, ate less fruits and vegetables due to cost

Table 3c. Financial strains experienced during the previous 12 months, by gender and race/ethnicity, ages 25-64 yr, 2017

In the past 12 months:	Men 25-64 yr				Women 25-64 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Had difficulty "making ends meet" at the end of a month	9.9%	17.0% [b]	17.4% [b]	6.0% [c]	14.9% [d]	24.3% [a,d]	14.6%	8.0% [b]
Worried that food might run out before had money to buy more	3.4%	7.7% [c]	7.6% [c]	2.1%	3.6%	12.2% [a]	3.8% [d]	2.5%
Worried about ability to pay for medical expenses	8.2%	9.7%	13.6% [c]	5.4%	10.6%	7.4%	8.9% [d]	3.9% [a]
Worried a great deal about own/family's financial security	23.2%	30.5% [c]	31.3% [c]	26.1%	29.2% [d]	35.2%	30.7%	21.2% [b]
Because of the cost:								
Delayed/did not get needed medical care	9.0%	8.9%	12.3%	3.6% [a]	11.6%	7.4%	9.6%	8.5% [d]
Reduced/did not use an Rx medicine	3.2%	5.2%	5.1%	2.3%	4.2%	7.4% [c]	3.9%	1.9%
Delayed/did not get needed dental care	16.6%	20.5%	19.1%	10.1% [c]	18.7%	23.3%	20.6%	13.4% [c]
Ate less fruits and vegetables than wanted	6.7%	8.7%	9.3%	4.0%	8.3%	15.2% [b,d]	12.0%	6.1%
Experienced financial strains in past 12 mos.*	27.3%	36.5% [c]	37.0% [b]	21.0% [c]	31.7%	45.1% [a,d]	34.4%	22.9% [b]
Experienced financial strains* and/ or was worried about financial security	35.9%	49.4% [a]	48.3% [b]	34.3%	41.8%	53.8% [a]	45.5%	33.3% [b]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.
* In past 12 months, worried about having enough money for food, worried about having enough money to pay for medical expenses, had difficulty "making ends meet", delayed/did not get medical care or dental care due to cost, reduced prescription medication use due to cost, ate less fruits and vegetables due to cost

Table 3d. Financial strains experienced during the previous 12 months, by gender and race/ethnicity, ages 65-90 yr, 2017

In the past 12 months:	Men 65-90 yr				Women 65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Had difficulty "making ends meet" at the end of a month	5.0%	8.7%	8.8%	0.3% [b]	5.3%	12.3% [c]	7.2%	3.8% [d]
Worried that food might run out before had money to buy more	0.8%	1.9%	0.8%	<0.1%	0.2%	6.9% [a]	3.3% [b]	0.8%
Worried about ability to pay for medical expenses	5.9%	8.7%	6.3%	3.9%	4.2%	10.0% [c]	8.2%	6.2%
Worried a great deal about own/family's financial security	10.6%	17.0%	16.5%	5.5%	12.1%	17.9%	10.5%	14.8% [d]
Because of the cost:								
Delayed/did not get needed medical care	2.3%	7.3% [c]	6.2%	1.5%	2.1%	6.9% [c]	2.0%	2.1%
Reduced/did not use an Rx medicine	1.8%	5.1%	5.9% [c]	4.1%	2.2%	5.6%	0.8% [d]	2.7%
Delayed/did not get needed dental care	14.1%	20.4%	23.1% [c]	7.0% [c]	13.6%	30.5% [a]	25.4% [b]	13.1%
Ate less fruits and vegetables than wanted	2.3%	7.0% [c]	4.3%	0.9%	1.8%	7.7% [b]	7.8% [b]	1.5%
Experienced financial strains in past 12 mos.*	18.8%	28.7% [c]	27.6% [c]	12.3%	18.8%	38.4% [a]	30.6% [b]	19.6%
Experienced financial strains* and/or was worried about financial security	23.9%	32.7%	33.4% [c]	16.4%	24.4%	42.2% [a]	36.0% [c]	26.8%

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.
* In past 12 months, worried about having enough money for food, worried about having enough money to pay for medical expenses, had difficulty "making ends meet", delayed/did not get medical care or dental care due to cost, reduced prescription medication use due to cost, ate less fruits and vegetables due to cost

Table 4a. Non-financial social risks experienced during the previous 12 months, by age group and gender, 2017

In the past 12 months:	25-64 yr			65-90 yr			25-90 yr
	Men	Women	All	Men	Women	All	All
Worried about own/family's safety	8.4%	8.0%	8.2%	3.7%	4.6%	4.2%	7.3% [d]
Felt harassed or discriminated against	8.2%	7.3%	7.7%	2.4%	4.1%	3.4%	6.7% [e]
Was physically or emotionally hurt or felt threatened by a current/ former partner or someone else	6.6%	5.8%	6.2%	3.4%	4.4%	4.0%	5.7% [f]
Felt very stressed, tense or anxious much of the time	17.1%	25.2% [a]	21.4%	5.3%	9.5% [c]	7.6%	18.2% [g]
Has felt dissatisfied with life	9.5%	9.9%	9.7%	4.7%	5.3%	5.0%	8.6% [h]
Was an unpaid care to a relative/friend	18.8%	24.7% [a]	22.0%	20.5%	25.0%	23.0%	22.2%

[a] Sex difference within age group significant at P <.001 after controlling for age and race/ethnicity

[b] Sex difference within age group significant at P < .01 after controlling for age and race/ethnicity

[c] Sex difference within age group significant at P < .05 after controlling for age and race/ethnicity

[d] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.01) and adults aged 65-90 less likely (P<.05) than adults aged 45-64 to have worried about their/their family's safety.

[e] After controlling for gender and race/ethnicity, adults aged 65-90 were less likely (P<.001) than adults aged 45-64 to have experienced harassment or discrimination in the previous year; adults aged 25-44 did not significantly differ from those aged 45-64.

[f] After controlling for gender and race/ethnicity, adults aged 65-90 were less likely (P<.05) than adults aged 45-64 to have experienced harassment or discrimination in the previous year; adults aged 25-44 did not significantly differ from those aged 45-64.

[g] After controlling for gender and race/ethnicity, adults aged 25-44 were more likely (P<.001) and adults aged 65-90 less likely (P<.001) than adults aged 45-64 to feel very stressed, tense or anxious much of the time.

[h] After controlling for gender and race/ethnicity, adults aged 65-90 were less likely (P<.001) than adults aged 45-64 to feel dissatisfied with their life; adults aged 25-44 did not significantly differ from those aged 45-64.

Table 4b. Non-financial social risks experienced during the previous 12 months, by age group and race/ethnicity, 2017

In the past 12 months:	25-64 yr				65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Worried about own/family's safety	7.9%	9.7%	9.5%	7.9%	3.1% [d]	7.4% [b]	8.8% [a]	4.7%
Felt harassed or discriminated against	5.8%	15.1% [a]	9.4% [c]	8.0%	3.1% [d]	8.5% [b,d]	3.7% [d]	2.1% [d]
Was physically or emotionally hurt or felt threatened by a current/former partner or someone else	5.8%	9.4% [b]	5.4%	6.6%	3.8%	6.4% [b]	4.3%	2.9%
Felt very stressed, tense or anxious much of the time	22.6%	24.6%	23.8%	15.9% [a]	8.2% [d]	8.2% [d]	7.6% [d]	3.6% [c,d]
Has felt dissatisfied with life	10.6%	16.1% [b]	6.8% [b]	7.3% [c]	4.8% [d]	9.0% [c,d]	6.2%	4.0%
Was an unpaid care to a relative/friend	22.7%	23.7%	20.2%	18.8%	24.2%	27.4%	22.1%	13.0% [a]

[a] Within age group, significantly (P<.001) different from White after controlling for age and sex
[b] Within age group, significantly (P<.01) different from White after controlling for age and sex
[c] Within age group, significantly (P<.05) different from White after controlling for age and sex
[d] Within same race/ethnic group, Seniors significantly (P<.05) differ from Non-Seniors after controlling for sex.

Table 4c. Non-financial social risks experienced during the previous 12 months, by gender and race/ethnicity, ages 25-64 yr, 2017

In the past 12 months:	Men 25-64 yr				Women 25-64 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Worried about own/family's safety	7.8%	8.9%	9.4%	8.6%	7.9%	10.4%	9.5%	7.2%
Felt harassed or discriminated against	7.2%	14.5% [b]	9.4%	6.9%	4.5%	15.6% [a]	9.3%	8.9% [c]
Was physically or emotionally hurt or felt threatened by a current/former partner or someone else	6.4%	11.2% [c]	6.0%	5.9%	5.2%	8.1%	4.9%	7.1%
Felt very stressed, tense or anxious much of the time	17.1%	20.5%	19.9%	11.9% [c]	27.7% [d]	27.7% [d]	27.1% [d]	19.2% [b,d]
Has felt dissatisfied with life	9.7%	13.6%	7.9%	7.9%	11.5%	18.0% [b]	5.9% [b]	6.8% [c]
Was an unpaid care to a relative/friend	17.9%	21.7%	20.4%	14.1%	27.0%	25.1%	20.0%	22.8%

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Table 4d. Non-financial social risks experienced during the previous 12 months, by gender and race/ethnicity, ages 65-90 yr, 2017

In the past 12 months:	Men 65-90 yr				Women 65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Worried about own/family's safety	2.1%	8.6% [b]	12.8% [a]	3.0%	3.9%	6.5%	5.7% [d]	6.2%
Felt harassed or discriminated against	2.2%	7.1%	3.5%	1.1%	3.9%	9.5% [c]	3.8%	3.0%
Was physically or emotionally hurt or felt threatened by a current/former partner or someone else	3.3%	5.1%	4.4%	3.4%	4.2%	7.3%	4.2%	2.4%
Felt very stressed, tense or anxious much of the time	5.3%	6.0%	10.0%	<0.1%	10.6% [d]	9.7%	5.6%	6.8% [d]
Has felt dissatisfied with life	4.6%	7.6%	7.6%	3.1%	5.0%	9.9% [c]	5.2%	4.9%
Was an unpaid care to a relative/friend	21.1%	22.6%	23.5%	13.6%	26.7%	30.8%	20.9%	12.4% [b]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Table 5a. Health beliefs, by age group and gender, 2017

	25-64 yr			65-90 yr			25-90 yr
	Men	Women	All	Men	Women	All	All
Believes health habits and lifestyle can have a large effect on their health	87.8%	91.1% [b]	89.5%	83.0%	86.6%	84.9%	88.5%
Believes health habits and lifestyle have little or no effect on their health	4.6%	3.3% [c]	3.9%	6.8%	4.7% [c]	5.7%	4.3%
Believes stress and emotional troubles (such as depression or anxiety) can have a large effect on their health	81.3%	87.4% [a]	84.5%	71.7%	80.2% [a]	76.4%	82.7%
Believes stress and emotional troubles (such as depression or anxiety) have little or no effect on their health	8.9%	6.5% [c]	7.6%	17.5%	10.7% [a]	13.7%	9.0%

[a] Sex difference within age group significant at P <.001 after controlling for age and race/ethnicity
[b] Sex difference within age group significant at P < .01 after controlling for age and race/ethnicity
[c] Sex difference within age group significant at P < .05 after controlling for age and race/ethnicity

Table 5b. Health beliefs, by age group and race/ethnicity, 2017

	25-64 yr				65-90 yr			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Believes health habits and lifestyle can have a large effect on their health	92.9%	88.1% [a]	86.4% [a]	84.4% [a]	89.2% [d]	82.1% [a,d]	76.0% [a,d]	69.6% [a,d]
Believes health habits and lifestyle have little or no effect on their health	2.0%	4.9% [b]	5.7% [a]	6.3% [a]	2.6%	9.9% [a,d]	11.4% [a,d]	15.4% [a,d]
Believes stress and emotional troubles (such as depression or anxiety) can have a large effect on their health	88.8%	87.3%	80.9% [a]	77.5% [a]	80.4% [d]	76.3% [d]	68.4% [a,d]	60.6% [a,d]
Believes stress and emotional troubles (such as depression or anxiety) have little or no effect on their health	4.2%	7.0% [c]	10.0% [a]	12.7% [a]	9.4% [d]	13.6% [c,d]	22.5% [a,d]	29.9% [a,d]

[a] Within age group, significantly (P<.001) different from White after controlling for age and sex
[b] Within age group, significantly (P<.01) different from White after controlling for age and sex
[c] Within age group, significantly (P<.05) different from White after controlling for age and sex
[d] Within race/ethnic group, significantly (P<.05) different from Non-Seniors after controlling for sex.

Table 5c. Health beliefs, by gender and race/ethnicity, ages 25-64, 2017

	Men				Women			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Believes health habits and lifestyle can have a large effect on their health	90.7%	86.2%	83.6% [b]	83.9% [b]	95.0% [d]	89.6% [b]	88.7% [a]	84.8% [a]
Believes health habits and lifestyle have little or no effect on their health	3.1%	4.6%	7.1% [c]	6.0%	1.0% [d]	5.0% [b]	4.4% [b]	6.6% [a]
Believes stress and emotional troubles (such as depression or anxiety) can have a large effect on their health	84.4%	83.8%	78.3% [c]	75.1% [b]	92.8% [d]	90.0% [d]	83.1% [a]	79.4% [a]
Believes stress and emotional troubles (such as depression or anxiety) have little or no effect on their health	6.5%	8.7%	10.3%	13.7% [a]	2.1% [d]	5.7% [c]	9.7% [a]	11.9% [a]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Table 5d. Health beliefs, by gender and race/ethnicity, ages 65-90, 2017

	Men				Women			
	White	Black	Latinx	Asian	White	Black	Latinx	Asian
Believes health habits and lifestyle can have a large effect on their health	87.2%	78.9% [c]	73.8% [a]	69.3% [a]	90.8%	84.4% [c]	77.9% [a]	69.7% [a]
Believes health habits and lifestyle have little or no effect on their health	4.1%	8.8%	10.5% [b]	17.0% [b]	1.4% [d]	10.7% [a]	12.1% [a]	14.0% [a]
Believes stress and emotional troubles (such as depression or anxiety) can have a large effect on their health	74.7%	73.7%	62.3% [b]	60.1% [b]	85.1% [d]	78.1% [c]	73.2% [b,d]	61.1% [a]
Believes stress and emotional troubles (such as depression or anxiety) have little or no effect on their health	13.9%	14.6%	26.6% [a]	30.9% [a]	5.6%	12.9% [b]	19.3% [a]	29.0% [a]

[a] Within sex group, significantly (P<.001) different from White after controlling for age
[b] Within sex group, significantly (P<.01) different from White after controlling for age
[c] Within sex group, significantly (P<.05) different from White after controlling for age
[d] Within same race/ethnic group, women significantly (P<.05) differ from men.

Appendix 1. MHS2017 Methodology, Response Rates, and Respondent Counts

In the 2017 survey cycle, we mailed questionnaires and emailed links to the online version of the questionnaire to a stratified random sample of approximately 22,000 adult Health Plan members ages 25-90 in the KPNC region. Because the 2017 survey sample was only going to be half as large as was used for previous cycles due to budgetary constraints, we employed a different sampling strategy than was used for previous survey cycles that we hoped would yield adequate numbers of White, Black, Latinx, and Asian men and women in three age groups (25-44, 45-64, 65-90) to enable comparisons of characteristics by race/ethnicity. This was done with the knowledge that the survey response rate would be lower due to oversampling of demographic subgroups (i.e., younger adults, Blacks, and Latinx adults) that traditionally are less likely to participate in surveys like this. The survey sample was restricted to members whose electronic health records (EHR) indicated English as a preferred written and spoken language because in the prior attempts to survey Spanish speakers we had extremely low participation rates and we could not afford to translate, print, and mail survey materials in multiple languages. Members were sent print survey materials and companion email links up to two times to try to boost the response rate. Survey participants were told that they would automatically be enrolled in a drawing for one of 100 x $100 gift cards.

As expected, the overall response rate (23%) was considerably lower than was achieved in the 2014/2015 survey cycle, varying by race/ethnicity and sex, and increasing with age. However, the response rates by race/ethnicity x age group x sex were in line with what we had expected based on response rates for these demographic groups in the 2014/2015 survey cycle. Survey respondents were assigned post-stratification weights based on the age (5-year intervals) distributions for men and women in their race/ethnic group derived from a 2016 Demographically Enriched Cohort of Kaiser Adults (DECKA2016) that had been created for another study.[1] Analyses based on the final weighted respondent sample thus approximately reflects the age x sex x race/ethnic composition in 2016 of KPNC members aged 25-90 whose primary language was English. Because of differences in the method used to select the sample (sampling from 4 race/ethnic groups at the regional level vs. from 19 medical center service populations) and to create the survey weighting factors (based on age-sex composition of each race/ethnic group vs. age-sex composition of each medical center service population), the 2017 survey results are not directly comparable with those from other survey cycles.

MHS2017 response rates by age group, race/ethnicity and sex, ages 25-90

	White	African-American/Black	Latinx	Asian	All
Men					
25-44 yr	12.8	7.4	7.4	13.5	9.7
45-64 yr	26,5	15.7	19.9	23.3	21.4
65-90 yr	59.5	34.1	44.8	50.1	48.5
Women					
25-44 yr	23.5	16.5	17.2	21.2	19.5
45-64 yr	37.0	28.0	28.7	30.5	31.3
65-90 yr	64.0	41.6	44.2	50.0	51.4
All 25-90 yr	30.2	17.1	18.7	26.1	22.8

_____

[1] Gordon NP, Lin TY, Rau JL, Lo JC. Aggregation of Asian-American subgroups masks meaningful differences in health and health risks among Asian ethnicities: An electronic health record based cohort study. *BMC Public Health* **19,** 1551 (2019) doi:10.1186/s12889-019-7683-3.

Final MHS2017 respondent sample prior to weighting to the 2016 KPNC membership

	White	African-American/Black	Latinx	Asian	Other	Total
All						
25-64 yr	1022	670	761	710	46	3209
25-44 yr	465	322	364	317	19	1487
45-64 yr	557	348	397	393	27	1722
65-90 yr	736	309	340	386	25	1796
Men						
25-64 yr	503	310	376	363	17	1569
25-44 yr	226	153	177	157	7	720
45-64 yr	277	157	199	206	10	849
65-90 yr	356	140	166	197	15	874
Women						
25-64 yr	519	360	385	347	29	1640
25-44 yr	239	169	187	160	12	767
45-64 yr	280	191	198	187	17	873
65-90 yr	380	169	174	189	10	922

Appendix 2. 2017 Member Health Survey Sociodemographic and Social Risk Questions

Table #	Question and Response Wording
3	**What is the <u>highest</u> level of school you <u>completed</u>?** *(Check ONE only)* □ 8th grade or less *(primary or middle school)* □ Some college *(no degree)* □ 9th - 11th grade *(some high school)* □ Associate's Degree *(e.g., AA, AS)* □ 12th grade *(high school graduate/G.E.D.)* □ Bachelor's Degree *(e.g., BA)*, teaching credential □ Technical/trade school certificate □ Graduate or professional degree *(e.g., MA, MD)*
3	**Which of the following best describes your total household (family) income from all sources <u>in 2016</u>, before taxes?** *(Check ONE only)* □ Under $15,000 □ $35,001 - $50,000 □ $80,001 - $100,000 □ $15,000 - $25,000 □ $50,001 - $65,000 □ $100,001 - $150,000 □ $25,001 - $35,000 □ $65,001 - $80,000 □ More than $150,000
5	**During the <u>past 12 months</u>, did any of these situations or problems occur?** *(Check ALL that apply)* □ You were **physically or emotionally hurt or felt threatened** by a current or former spouse/partner or someone else you knew
5	□ You felt **harassed or discriminated against**
5	□ You worried about your or your family's **safety due to neighborhood violence**, robberies, etc.
4	□ You worried a great deal about your or your family's **financial security**
4	□ You worried that **your food might run** out before you had money to buy more
4	□ You worried that you **might not be able to pay for needed medical care** or medicines/medical supplies
4	□ You had **problems making ends meet** at the end of a month
4	**During the <u>past 12 months</u>, did you:** a. **Start to take a medicine in smaller doses or less frequently than prescribed, or decide not to fill a prescription *because of the cost*?** □ Yes □ No b. **Delay or <u>not</u> get medical care you thought you needed *because of the cost*?** □ Yes □ No c. **Delay or <u>not</u> get dental care you thought you needed *because of the cost*?** □ Yes □ No d. **Eat <u>less</u> fruit and vegetables than you wanted to *because of the cost*?** □ Yes □ No
5	**During the <u>past 12 months</u>, how often have you felt very stressed, tense or anxious?** □ Never □ A little of the time □ Some of the time □ Much of the time □ Most of the time
5	**In general, how satisfied are you with your life?** □ Very satisfied □ Satisfied □ Dissatisfied □ Very dissatisfied
5	**During the <u>past 12 months</u>, did you provide <u>unpaid</u> care to a relative or friend who is or was seriously ill, is frail, or has a physical, developmental, mental, or emotional disability?** *(Helping with personal needs, managing finances, arranging for services, etc.)* □ Yes □ No
6	**How much do you think habits/lifestyle (such as exercise, what you eat, and your weight) can affect your health?** □ Not at all □ A little bit □ Moderately □ Quite a bit □ Extremely
6	**How much do you think stress and emotional troubles (such as depression or anxiety) can affect your health?** □ Not at all □ A little bit □ Moderately □ Quite a bit □ Extremely