

Member Health Survey Project Special Report:

Seniors' Access to Information Technology and Preferred Methods of Obtaining Health Information and Health Education in 2011

Estimates based on data from adults aged 65 and over who responded to the 2011 Kaiser Permanente Northern California Region Member Health Survey:

- **Access to Personal Computer, Internet, Email, Mobile phone, and Text messaging**
- **Methods used in the 12 months prior to the survey to obtain health information and help with changing health-related behaviors**
- **Preferred methods for obtaining health information and help with changing health-related behaviors and risks**

The Member Health Survey is a project funded by Kaiser Permanente's Northern California Region Community Benefit Program (CB). These survey results are being made available to the public as part of Kaiser Permanente's commitment to sharing research findings based on our membership that might inform decisions about methods of outreach to improve the health of our communities. This information should not be used as the basis for any professional publication without permission of Dr. Nancy Gordon, and slides used for presentations should credit the Kaiser Permanente 2011 Member Health Survey as the source.

We suggest that statistics from this report be referenced as follows:

For table footnotes or text references:

Data from the 2011 Kaiser Permanente Member Health Survey conducted by the KPNC Division of Research.

In a reference list:

Gordon NP. Seniors' Access to Information Technology and Preferred Methods for Obtaining Health Information and Health Education, 2011. Internal report, Division of Research, Kaiser Permanente Medical Care Program, Oakland, CA, November 2012.

http://www.dor.kaiser.org/external/senior_it_access_2011.

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November 2012

Background

Health information, health advice, and health education are critical components of modern health care, especially in the realms of disease prevention, chronic disease management, and improving overall physical and emotional well-being. Health information and advice are easier to provide because they are unidirectional, i.e., it is expected that once people are made more knowledgeable and given advice about how to use that knowledge, they will act appropriately if it is within their power to do so. Health education goes beyond provision of health information and advice to empowering people to make change. It involves motivating people to make changes in their behavior and way of thinking that are conducive to better health; teaching them how to implement these changes; offering supportive advice and encouragement as they attempt to make changes; reinforcing the adoption of positive change; and helping those who are not successful or who relapse after some success figure out what they need to do differently.

Health education has moved far beyond individual instruction by clinical staff, classes led by patient and health educators, and distribution of printed materials to embrace use of different information technology, including video, television programming, and Internet-based programs. Health educators recognize, however, that provision of culturally and educationally competent health education to a large and diverse membership will require use of many different modalities and channels of communication, both low and high tech. The Internet makes it possible to provide vast amounts of information to very large numbers of people more cost-effectively than handing out or mailing print materials. However, not everyone has developed competence in navigating the Internet, and many people still do not have easy access to computers and Internet connections that can efficiently handle transfer of large-volume information files like media streaming. While younger and more tech-savvy members may prefer to access information and health education by interacting with a website, older members and members with lower levels of educational attainment may prefer lower tech modalities such as print materials, DVDs/videos, and contact with a real person in-person or over the phone, even if they have access to the Internet.

This report is based on data from the 2011 Kaiser Permanente Northern California (KPNC) Adult Member Health Survey conducted by the Kaiser Permanente Division of Research. It is designed to contribute to the evidence base for best practices for population-sensitive dissemination of information and health education planning by providing information about current access to the Internet and email and preferences for different modalities of obtaining health information and health education among adults aged 65 and over.

Description of the 2011 KPNC Member Health Survey

The 2011 KPNC Adult Member Health Survey (MHS) was conducted during Spring-Summer 2011 using a mailed questionnaire and online survey. In addition to collecting information about sociodemographic characteristics, selected health conditions, and health-related risks, the survey asked about access to a personal computer, the Internet, email, mobile phones, and text messaging; preferred methods of receiving health information (in addition to talking with the doctor); and methods used in the past 12 months to get health information or advice. The primary purpose of the Member Health Surveys project is to provide information

about sociodemographic and health-related characteristics of this Northern California adult health plan population as of the current survey year and to be able to examine trends over time. This survey, which has been conducted every 3 years starting in 1993, is funded by KPNC’s Community Benefit (CB) Program, which is committed to sharing research findings with the community.

Survey Methods: Seniors in the Member Health Survey Sample

In April 2011, questionnaires were mailed to a stratified random sample of 10,027 adult Health Plan members aged 65 and over in the Northern California Region. Only current members who had been continuously enrolled during the three months prior to the survey were eligible for sampling. Two subsequent survey packet mailings were sent over the next several weeks to non-respondents, with the final wave of questionnaires mailed in mid-July. The survey was administered over the phone upon request. Non-eligibles (deceaseds, non-current members, out of area) and members for whom no good address could be found were dropped from the initial sample and replaced with other randomly selected members of the same age, gender, and service population. The overall response rate among seniors was 68.7% (68.9% of women and 68.5% of men). Respondent sample size and response rates (after excluding non-eligibles) for ages 65-74, 75-79, and 80 and over were as follows:

	<u>65-74 years</u>	<u>75-79 years</u>	<u>80 years and over</u>
Women	1499/2264 (66.2%)	1364/1886 (72.3%)	513/746 (68.8%)
Men	1452/2267 (64.0%)	1356/1886 (71.9%)	547/746 (73.3%)
All	2951/4531 (65.1%)	2720/3772 (72.1%)	1060/1492 (71.0%)

Post-stratification weighting factors were assigned to respondent data so that calculated estimates would reflect the actual age, gender, and geographic distribution of the adult Northern California Health Plan membership as of April 2011, rather than that of the respondent sample. However, since the questionnaire was only available in English, limited proficiency English speakers and members with low literacy are not represented in this survey.

A copy of the questions used in the survey to ascertain IT access, use of different health information modalities in the previous year, and interest in different web-based and more traditional modalities for health education can be found at the end of the report.

Results

Sample Demographics (Table 1)

The survey sample is predominantly nonHispanic White (74%) and fairly well-educated (64% of women and 72% of men with at least some college and 31% of women and 45% of men with a college degree, with percentage of college graduates declining with age). While only 15% of seniors (28% of women, 15% of men) had a household income of \$25,000 or less (<\$15,000 for 10% of women and 5% of men), the percentages of seniors aged 75 and over at these lower income levels is double that of seniors in the 65-74 age group. In the discussion of the survey results, “younger” seniors refers to those in the 65-74 age group (mean age 69), “middle” seniors refers to those aged 75-79 (mean age 77), and “older” seniors to those aged 80 and over (mean age 85 for women and 84 for men).

Access to Digital Communication Tools (Table 2)

- Approximately 68% of seniors have mobile phones and around half of those with mobile phones can receive text messages. However, among both women and men, access to mobile phones and text messaging capability declines significantly with age. While approximately 46% of all seniors aged 65-74 (57% of those with a mobile phone) can receive text messages, this declines to 27% of seniors aged 75-79 (43% if have a mobile phone) and 15% of seniors aged 80 or over (33% if have a mobile phone),
- Approximately 75% of seniors have access to a computer (desktop, laptop, or net book), but access declines with age (87%, 70%, and 51%, respectively). Most of those with access to a computer have one at home.
- Approximately 76% of seniors can use the Internet to get information from websites. Ability to get information from the Internet declines with age (87%, 72%, and 56%, respectively). Lower percentages can access information from the Internet at home (by age group, 77%, 58%, and 38%, respectively). Of those seniors who are able to get information from the Internet, 16% (by age group, 10%, 20%, and 34%, respectively) have someone else get it for them.
- Approximately 73% of seniors can send and receive email. Ability to send and receive email declines with age (by age group: 84%, 68%, and 53%, respectively). Of those seniors who are able to send and receive email, 15% (by age group, 9%, 18%, and 33%, respectively) have someone else use email for them.
- Of those seniors who use the Internet and email, across all age groups over 95% are accessing these tools using a computer, laptop, or net book. Other modalities used include tablet (to access information from the Internet, by age group: 6%, 3%, and 2%; for email: 5%, 3%, and 2%), cell phone (for both Internet access and email, by age group: 6%, 5%, and 5%), and smart phone (for both Internet and email, by age group: 9%, 3%, and 1%).

Use of Different Health Information Resources in the Previous 12 Months (Table 3)

- Health information from the Internet: Overall, slightly over 20% of seniors reported that they had obtained health information from any website in the past 12 months, but this significantly declined with age (27%, 18%, and 11%, respectively). Among those who indicated ability to get information from the Internet, an overall 28% had gone to the web for health information, with significant declines by age (31%, 26%, and 20%, respectively).

However, the percentage of seniors getting information from the Internet may actually be significantly higher than that. When we added seniors who reported getting health information from the MD Home Page on kp.org, the kp.org Health or Drug Encyclopedias, or an online kp.org health/patient education program (use of kp.org secure features not included), the overall percentage who had obtained health information from a website increased significantly to nearly 34% of all seniors (by age: 41%, 30%, and 20%, respectively) and 43% of those who had the ability to use the Internet (by age: 46%, 41%, and 33%, respectively).

- Information from kp.org: Slightly over one-quarter (26%; by age, 32%, 23%, and 16%) of seniors reported getting health information from at least one of the three kp.org sources listed (MD Home Page, Health or Drug Encyclopedia, or online patient education program). Among those with ability to use the Internet, 33% got health information from kp.org (by age, 36%, 31%, and 26%).

When we looked at use of at least one of these kp.org health information sources or use of kp.org secure features (secure messaging, lab views, prescription refills, or booking appointments), overall 49% of seniors (by age, 60%, 43%, and 30%) of those who can get information from the Internet indicated using at least one of these kp.org services. Among

those with ability to use the Internet, the percentages were significantly higher (63% overall, and by age 68%, 59%, and 49%).

- Use of specific kp.org information features: Approximately 18% of seniors (by age, 22%, 17%, and 12%) got information from the MD Home Page. Among those with ability to use the Internet, the percentages were significantly higher for all seniors (24%) and for the older senior groups (25%, 24%, and 19%, respectively).

Approximately 12% of seniors (by age, 16%, 9%, and 7%) got information from the online Health or Drug Encyclopedias, and approximately 6% of seniors (by age, 7%, 4%, and 4%) had used any online kp.org patient/health education program. Usage of both of these information sources was not substantially higher when we restricted to those with ability to use the Internet.

Nearly half (47%) of seniors (by age, 57%, 40%, and 27%) had used at least one of the four kp.org secure communication features (messaging, lab views, prescription refill, appointments). Among those with ability to use the Internet, the percentages were significantly higher (61% overall, by age group 66%, 57%, and 46%).

- Use of KP non-digital health information modalities: There was little difference across age groups in use of health information from non-digital sources. Slightly over half (54%) of seniors had read at least one member newsletter (no significant difference by whether could receive email or not), 21% had used print health education materials or DVDs, 11% had participated in an individual or group health education program, approximately 6% had one or more individual health behavior counseling sessions, and 8% had obtained information from a Health Education Center or Resource Desk. Women were more likely than men to be readers of the member newsletters.

Preferred Methods for Learning about How to Take Care of and Improve Health (Table 4)

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?"

- Health information using the Internet or computer: Overall, approximately 20% of seniors were interested in getting health information from websites, but this significantly declined with age (26%, 15%, and 9%, respectively). Among those who indicated ability to get information from the Internet, an overall 26% were interested, again with significant declines by age (30%, 21%, and 15%). These percentages mirrored those for obtaining health information from a website in the previous 12 months. The percentages of seniors interested in obtaining information from the MD Home Page were not significantly different from those willing to get it from any website.

Approximately 6% of seniors were interested in single-session web or email based patient education programs, dropping to 3% if they were multi-session. Approximately 4% of seniors were interested in watching live webinars or talks on kp.org, but 8% were interested in watching online health videos on kp.org or other websites. Only approximately 3% of seniors aged 65-74 and 1% of those aged 75 and over were interested in podcasts. However, nearly one-quarter (23%) of seniors (and 31% of those who can use email) were interested in emailed health newsletters and tip sheets. Across all of these web and email-based modalities (with the exception of podcasts where interest was universally extremely low), there were significant differences in preference for obtaining health information and education via using these modalities between those under age 75 and those aged 75 and over, and these differences persisted even when restricted to seniors who indicated they could use the Internet.

Interactive computer programs were of interest to around 7% of seniors, but more so among younger seniors (by age, 10%, 4%, and 2%). Access to a computer did not substantially affect interest in receiving health education using this modality.

- Communication via Secure Messaging and Text Messaging: Overall, 16% of seniors were interested in using secure email communications to communicate about their health – a significantly lower percentage than those getting emailed health newsletters and tip sheets. Preference for using secure email communications significantly declined with age (22%, 15%, and 7%). Percentages interested in email communications were significantly higher when we restricted to those who can use email (overall 23%, by age, 26%, 21%, and 12%), but still significantly lower than interest in use of email for general health education.

Interest in using text messages to communicate about health was much lower than interest in using email. Overall, only 3% of seniors (by age, approximately 5%, 2%, and 1%) were interested in text messages. Of those who say they have the ability to send and receive text messages, only about 9% (by age, 10%, 6%, 5%) were interested in using this method of communication.

- Non-Internet Based Methods: Approximately one-quarter of seniors were interested in getting health education via both In-person individual counseling and brief individual telephone counseling sessions. While there was some decline in interest with age, the age-related differences were much smaller than was observed for the web-based modalities. Approximately half as many seniors were interested in small group appointments and one-session workshops (overall around 10-11%, with significant decline by age), and even less were interested in multi-session in-person classes. Less than 1% of seniors were interested in multi-session programs conducted over the phone.

With regard to media-based health education, about 10% of seniors were interested in watching DVDs at home (approximately same percentage as were interested in watching videos online), and 33% were interested in having health newsletters and tip sheets mailed to their home. While interest in emailed newsletters and tip sheets had declined with age, interest in having newsletters and tip sheets sent to the home by regular mail was significantly higher among the older senior groups.

Putting 2011 Survey Results in Context

The graphs following the report tables show that since the Member Health Survey started tracking Internet access in 1999, Internet and email access has continued to increase among 65-79 year olds. However, in addition to age-related disparities in Internet and email access documented in this report that affect seniors' ability to obtain information electronically, there are differences in ability to use the Internet and email to obtain and respond to health information and communicate with the health care system. Among seniors aged 65-79, significantly lower percentages of Blacks and Latinos compared with nonHispanic Whites are able to use the Internet to get health information and email. Ability to use the Internet and email was also affected by level of income and level of education. Undoubtedly the latter two SES factors are partially responsible for the race-ethnic differences in Internet and email readiness.

Discussion

Approximately three-quarters of seniors in Kaiser Permanente's Northern California Region have access to a computing device (desktop, laptop, or net book) and are able to use the Internet and email to obtain information and communicate about their health. Over one-quarter of seniors reported having gone to a website at least once in the previous year to obtain health information, but this percentage increases to nearly one-third when we add in people who reported using a kp.org health information source but not that they had gone to a website. Among seniors who can use the Internet, health information seeking using the Internet was 28% and 43%, respectively. These percentages are significantly higher than the previous survey conducted in 2008, and increases were observed for Black and Latino seniors as well as for nonHispanic Whites. However, there is a digital divide among seniors with respect to ability to use the Internet to get information, to use email to send and receive messages, and

consequently experience with and preferences for using web-based versus non web-based modalities for learning and communicating about one's health. This digital divide exists between "young" and "older" seniors, between those with higher vs. lower educational attainment, between nonHispanic Whites vs. Blacks and Latinos, and likely by those who used computers, Internet, and email in the workplace versus those who did not.

Seniors are being encouraged to shift a lot of their health and health care related communications and transactions to the kp.org website (e.g., obtaining text and video health information and forms; communicating with health care providers and member services using secure messaging versus phone; refilling prescriptions, viewing test results, and booking routine appointments online rather than by phone; completing health questionnaires and forms online versus print). However, this shift has the potential for causing problems in obtaining health/health care information and interacting with the health care system for segments of the membership that are already more vulnerable to chronic health problems and health care access issues. It is thus important to ensure during the transition to a state where every member is able and willing to use the website as a one-stop shop for information and communications, that resources are always available in more low-tech modalities (print information, DVDs, phone, regular mail) for those who are unable or unwilling to access these resources from kp.org and other websites. In addition to issues of access, it is important to keep in mind that many seniors who are not used to communicating via email, using links and hyperlinks to websites, and having to remember how to log into and navigate the website, may maintain a preference for obtaining information and communicating with the health care system using more traditional methods.

Section 3: Your Communication Tools and Preferences

Do you have a mobile phone (cell phone or a smart phone like Blackberry, iPhone, or Droid)?

- Yes → **Can you receive text messages on this phone?** Yes No
 No

Are you able to access a computer (desktop, laptop, or netbook) if you want to use one?

- Yes, at home Yes, at another location (like work, library, neighbor, etc.) No

Are you able to use the Internet to get information from websites, and if so, how?

(Check **ALL** that apply)

- Yes, at home
 Yes, at another location
 Someone does this for me
 No, I am not able to use the Internet

What is usually used to get onto the Internet? (Check **ALL** that apply)

- Computer, laptop, netbook Cell phone Smart phone
 Tablet (iPad, iTouch, etc.) Other: _____

Are you able to send and receive/check email, and if so, how?

- Yes
 Someone does this for me
 No

What is usually used to send/check your email? (Check **ALL** that apply)

- Computer, laptop, netbook Cell phone Smart phone
 Tablet (iPad, iTouch, etc.) Other: _____

During the **past 12 months**, have you done any of the following? (Check **ALL** that apply)

- Participated in a Kaiser Permanente group or individual **health education program**
 Visited a Kaiser Permanente **Health Education Center** or **Resource Desk**
 Used Kaiser Permanente or other **smoking cessation service** (group, one-on-one, or online/email)
 Used a Kaiser Permanente or other **weight loss or Healthy Eating, Active Living program** (group, one-on-one counseling/coaching, online program, or email-based program)
 Got **health information** or advice at **kp.org** (Kaiser Permanente's website) or **other Internet websites**
 Got **one-on-one counseling** from Kaiser Permanente to help **change health-related behaviors** (smoking, diet, etc.) or **manage a chronic health condition** (diabetes, hypertension, heart disease, etc.)
 Used Kaiser Permanente **print health education materials** (handouts, pamphlets, DVDs, etc.)
 Read one of Kaiser Permanente's **member newsletters** (like *Partners in Health* or *Senior Outlook*)
 Used the **online Health Encyclopedia** or **Drug Encyclopedia** on the **kp.org** website
 Used **online health education programs** (preparing for a procedure, health calculator, or Healthy Lifestyle programs for nutrition, weight, stress, physical activity) on kp.org
 Got health information from your **doctors' home page** on the kp.org website (kp.org/my doctor)
 Used the **kp.org website to view lab results, refill prescriptions, or email doctors**

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? (Check **ALL** that apply)

- | | |
|---|---|
| <input type="checkbox"/> Small group appointments with a clinician or health educator (for diabetes, etc.) | <input type="checkbox"/> Use an interactive computer program |
| <input type="checkbox"/> Individual counseling with a health educator | <input type="checkbox"/> Watch live " webinar " programs/talks on kp.org |
| <input type="checkbox"/> Brief telephone counseling sessions | <input type="checkbox"/> Podcasts and online (kp.org) audio programs |
| <input type="checkbox"/> Communications using secure email | <input type="checkbox"/> Watch health videos on kp.org/other websites |
| <input type="checkbox"/> One session health education workshop | <input type="checkbox"/> Watch health DVDs at home |
| <input type="checkbox"/> Multi-session class/group in-person program | <input type="checkbox"/> Get Information from Internet websites |
| <input type="checkbox"/> Multi-session group program over the phone | <input type="checkbox"/> Get information from your doctor's home page |
| <input type="checkbox"/> One session program using email/internet | <input type="checkbox"/> Get information text messaged to your cell phone |
| <input type="checkbox"/> Multi-session program using email/Internet | <input type="checkbox"/> Health newsletters and tip sheets <u>emailed</u> to you |
| | <input type="checkbox"/> Health newsletters and tip sheets <u>mailed</u> to you |

Table 1. Demographic Characteristics of Sample Population, Members Aged 65 and Over in the Kaiser Permanente Northern California Membership, Spring 2011

Characteristics	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Race/Ethnicity												
White nonHispanic	71.9	74.0	72.9	72.1	77.5	74.5	78.4	81.0	79.4	73.8	76.2	74.4
African-American/Black	6.9	3.8	5.5	7.8	4.7	6.4	6.6	5.4	6.0	6.9	7.3	7.1
Latino/other Hispanic	7.2	8.1	7.6	6.8	7.1	6.9	6.4	5.4	6.0	6.9	7.3	7.1
Asian	11.5	11.1	11.3	11.3	8.6	10.1	7.2	7.5	7.3	10.3	9.8	10.1
Filipino	5.5	4.3	4.9	5.1	3.1	4.2	2.8	1.3	2.3	4.7	3.4	4.1
Chinese	2.9	3.4	3.1	3.1	2.9	3.0	2.3	2.7	2.5	2.8	3.1	2.9
Southeast Asian	0.5	0.5	0.5	0.2	0.4	0.3	--	0.3	0.1	0.3	0.4	0.4
Japanese	1.2	1.4	1.3	2.3	1.0	1.7	2.1	2.1	2.1	1.6	1.5	1.6
Korean	0.4	0.4	0.4	0.3	0.2	0.2	--	0.1	< 0.1	0.3	0.2	0.3
South Asian	0.8	1.2	1.0	3.6	1.0	0.6	--	1.0	0.4	0.4	1.1	0.7
Other Asian	0.2	<0.1	0.1	0.1	--	0.1	--	<0.1	<0.1	0.1	--	0.1
Pacific Islander	0.5	0.5	0.4	0.1	0.3	0.1	--	0.1	<0.1	0.3	0.3	0.3
Native American	1.4	1.2	1.3	1.4	0.8	1.1	1.0	1.0	1.0	1.3	1.1	1.2
Middle Eastern	0.4	1.3	0.8	0.5	0.8	0.6	0.1	0.3	0.2	0.4	1.0	0.6
Other	0.2	0.2	0.1	<0.1	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1
Education												
< High school Graduate	5.0	4.0	4.5	11.1	9.8	10.5	13.0	12.1	12.6	8.3	7.0	7.7
High school grad or GED	22.8	18.4	20.7	28.4	22.2	25.6	34.2	26.8	31.3	27.0	21.0	24.3
Some college	33.9	29.8	32.0	34.0	28.2	31.5	31.2	21.6	27.5	33.2	27.6	30.8
College graduate	38.3	47.8	42.8	26.5	39.8	32.3	21.6	39.5	28.6	31.5	44.4	37.2

-- = No one in age group indicated this race/ethnicity

Table 1. Demographic Characteristics of Sample Population, Members Aged 65 and Over in the Kaiser Permanente Northern California Membership, Spring 2011

Characteristics	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Income												
< \$15,000	6.9	4.0	5.5	13.7	5.1	9.8	13.7	6.1	10.7	10.0	4.7	7.6
\$15,000 – \$25,000	11.8	6.6	9.4	22.6	11.6	17.6	27.1	17.8	23.4	17.9	10.0	14.4
\$25,001 - <\$35,000	13.8	8.8	11.4	17.1	15.5	16.4	26.0	15.7	21.8	17.7	11.6	15.0
\$35,001 – \$50,000	17.0	17.8	17.4	15.3	19.5	17.2	14.7	20.7	17.1	16.1	18.8	17.3
\$50,001 - \$65,000	12.4	12.9	12.7	9.6	13.3	11.3	7.3	14.9	10.3	10.5	13.4	11.8
\$65,001 - \$80,000	11.5	13.0	12.2	9.4	12.0	10.6	6.6	10.1	8.0	9.8	12.2	10.9
> \$80,000	26.6	36.9	31.4	12.2	22.0	17.1	4.6	14.7	8.7	18.0	29.3	23.0

^S = Significant gender difference within age group at p<.05;

^{A1} = Significant age group difference compared to age group below; ^{A2} = Significant age group difference compared to age 65-74

Table 2. Access to Digital Tools for Communication, Members Aged 65 and Over in the Kaiser Permanente Northern California Membership, Spring 2011

Access to IT/ Digital Tool	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Mobile phone	81.0	77.7	79.5	64.4 ^{A1}	64.8 ^{A1}	64.6 ^{A1}	41.6 ^{A1}	56.0 ^{A1,S}	47.3 ^{A1}	67.2	70.4	68.6
Text Messages (all)	45.8	47.2	46.5	24.2 ^{A1}	30.9 ^{A1,S}	27.2 ^{A1}	13.1 ^{A1}	18.4 ^{A1,S}	15.2 ^{A1}	33.0	37.7 ^S	35.0
Those with mobile phone	56.9	61.3	58.9	38.4 ^{A1}	48.5 ^{A1,S}	43.0 ^{A1}	33.0 ^{A2}	33.8 ^{A1}	33.3 ^{A1}	49.8	54.2	51.8
Computer (desktop, laptop, net book)												
From any location	85.7	89.0	87.2	66.5 ^{A1}	73.7 ^{A1,S}	69.7 ^{A1}	44.0 ^{A1}	61.8 ^{A1,S}	51.1 ^{A1}	70.8	80.0 ^S	74.9
At home	80.2	85.3 ^S	82.6	61.6 ^{A1}	70.0 ^{A1,S}	65.4 ^{A1}	38.4 ^{A1}	56.5 ^{A1,S}	45.6 ^{A1}	65.4	75.9 ^S	70.1
Other location	13.2	14.3	13.7	7.5 ^{A1}	7.1 ^{A1}	7.3 ^{A1}	6.9 ^{A2}	7.1 ^{A2}	7.0 ^{A2}	10.4	11.3	10.8
Able to use the Internet												
From any location	85.6	89.0	87.1	78.7 ^{A1}	75.0 ^{A1,S}	71.5 ^{A1}	49.9 ^{A1}	65.2 ^{A1,S}	55.9 ^{A1}	72.8	81.0 ^S	76.5
At home	75.7	79.7	77.5	53.2 ^{A1}	63.8 ^{A1,S}	58.0 ^{A1}	29.9 ^{A1}	50.2 ^{A1,S}	38.0 ^{A1}	59.2	70.2 ^S	64.0
Other location	12.6	16.4	14.4	4.3 ^{A1}	6.4 ^{A1}	5.2 ^{A1}	2.0 ^{A2}	4.9 ^{A2}	3.1 ^{A2}	8.2	12.0 ^S	9.9
Requires help to use	9.1	8.3	8.7	16.4 ^{A1}	12.8 ^{A1}	14.8 ^{A1}	20.4 ^{A2}	16.9 ^{A2}	19.0 ^{A1}	13.5	11.1	12.4
Able to send/receive email	82.1	86.1 ^S	84.0	64.3 ^{A1}	71.8 ^{A1,S}	67.7 ^{A1}	47.1 ^{A1}	61.2 ^{A1,S}	52.7 ^{A1}	69.3	77.8 ^S	73.1
Requires help to use	6.6	8.9	7.7	12.8 ^{A1}	12.3	12.6 ^{A1}	18.9 ^{A1}	14.8 ^{A2}	17.2 ^{A1}	11.1	10.8	11.0
Method usually for Internet access (those with access)												
Computer/net book	99.3	98.8	99.1	98.1	99.2	98.6	95.8	96.8	96.3	98.5	98.5	98.5
Tablet (incl. iPad, iTouch)	5.3	6.2	5.7	3.6	3.1	3.4 ^{A1}	2.0 ^{A2}	2.8 ^{A2}	2.4 ^{A2}	4.5	5.1	4.8
Cell phone	6.3	6.3	6.3	4.9	4.8	4.8	5.1	6.0	5.5	5.9	6.0	5.9
Smart phone	7.6	11.1	9.2	1.6	5.2 ^{A1}	3.3 ^{A1}	0.5 ^{A2}	1.7 ^{A1}	1.0 ^{A2}	5.3	8.5	6.8

^S = Significant gender difference within age group at p<.05;

^{A1} = Significant age group difference compared to age group below; ^{A2} = Significant age group difference compared to age 65-74

Table 3. Use of Selected Health Information Resources in the Past 12 Months, Members Aged 65 and Over in the Northern California Kaiser Permanente Membership, Spring 2011

Accessed Internet-based Health Information Resource	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Got health information from kp.org or other websites												
All	27.9	26.1	27.1	16.9 ^{A1}	20.5 ^{A1}	18.5 ^{A1}	10.4 ^{A1}	12.7 ^{A1}	11.3 ^{A1}	21.0	22.1	21.5
Those with web access	32.6	29.4	31.1 ^W	24.3 ^{A1,W}	27.5 ^W	25.9 ^{A1,W}	20.1 ^{A1,W}	19.2 ^{A1}	19.7 ^{A1,W}	28.9 ^W	27.2 ^W	28.1 ^W
Got health information from kp.org/other websites OR kp.org MD home page, Health/Drug Encyclopedia, online pt ed program												
All	42.3	38.9	40.8	32.8 ^{A1}	27.8 ^{A1}	30.0 ^{A1}	17.4 ^{A1}	24.9 ^{A1}	20.4 ^{A1}	32.7	34.6	33.6
Those with web access	49.2 ^W	43.6 ^W	46.5 ^W	39.8 ^{A1,W}	43.0 ^W	41.4 ^{A1,W}	29.8 ^{A1,W}	36.7 ^{A2,W}	33.0 ^{A1,W}	44.0 ^W	42.2 ^W	43.1 ^W
Used kp.org Health or Drug Encyclopedia												
All	15.3	15.8	15.6	8.0 ^{A1}	10.2 ^{A1}	9.0 ^{A1}	6.2 ^{A2}	7.4 ^{A2}	6.6 ^{A2}	11.4	12.9	12.1
Those with web access	18.1	17.7	17.9	11.7 ^{A1}	13.5	12.6 ^{A1,W}	10.5	11.6	11.0 ^{A2}	15.6 ^W	15.8	15.7
Used any online kp.org health/patient ed program												
All	7.7	6.6	7.2	4.3 ^{A1}	4.8	4.5 ^{A1}	3.4	3.9	3.6 ^{A2}	5.9	5.7	5.8
Those with web access	9.0	7.5	8.3	6.3	6.2	6.3	6.5	6.1	6.3	8.1	7.0	7.6
Got health information from MD home page on kp.org												
All	22.1	21.6	21.8	16.4 ^{A1}	18.3	17.2 ^{A1}	10.0 ^{A1}	15.4	12.1 ^{A1}	17.7	19.5	18.5
Those with web access	25.5	24.2	24.9	23.5 ^W	24.2 ^W	23.8 ^W	17.1	22.0	19.3 ^{A2,W}	23.6 ^W	23.8 ^W	23.7 ^W

^S = Significant (p<.05) gender difference within age group at p<.05

^W = Significant (p<.05) difference in percentage for same age-gender group between those with Internet access and those without access

^{A1} = Significant (p<.05) age group difference compared to age group below ; ^{A2} = Significant (p<.05) age group difference compared to age 65-74

Table 3. Use of Selected Health Information Resources in the Past 12 Months, Members Aged 65 and Over in the Northern California Kaiser Permanente Membership, Spring 2011

Accessed Internet-based Health Information Resource	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Used at least one kp.org health information source												
All	32.6	30.8	31.8	20.9 ^{A1}	24.9 ^{A1}	22.7 ^{A1}	13.6 ^{A1}	20.1 ^{A1}	16.2 ^{A1}	25.1	27.3	26.1
Those with web access	37.8	34.5	36.3 ^W	30.0 ^{A1,W}	32.6 ^W	31.2 ^{A1,W}	23.1 ^{A1,W}	29.3 ^W	26.0 ^{A1,W}	33.7 ^W	33.3 ^W	33.5 ^W
Used kp.org website secure features (lab view, Rx refill, doctor messaging)												
All	56.2	58.4	57.2	38.2 ^{A1}	43.2 ^{A1}	40.5 ^{A1}	23.5 ^{A1}	33.6 ^{A1}	27.4 ^{A1}	43.8	50.0 ^{A1}	46.5
Those with web access	65.8 ^W	65.5 ^W	65.7 ^W	56.0 ^{A1,W}	57.9 ^{A1,W}	56.9 ^{A1,W}	44.0 ^{A1,W}	49.9 ^{A1,W}	46.3 ^{A1,W}	60.0 ^W	61.2 ^W	60.6 ^W
Used at least one kp.org health information source or kp.org secure feature												
All	58.9	60.5	59.6	40.3 ^{A1}	46.1 ^{A1,S}	42.9 ^{A1}	26.2 ^{A1}	37.2 ^{A1,S}	30.5 ^{A1}	46.3 ^S	52.5	49.1
Those with web access	68.5 ^W	67.8 ^W	68.2 ^W	58.4 ^{A1,W}	60.7 ^{A1,W}	59.5 ^{A1,W}	46.0 ^{A1,W}	53.2 ^{A2,W}	49.3 ^{A1,W}	62.6 ^W	63.9 ^W	63.2 ^W
Accessed Other KP Health Ed Resource												
Any individual or group health education program	13.0	11.6	12.3	10.0	11.3	10.6	8.0 ^{A2}	9.1	8.4	11.0	11.0	11.0
Health Education Center or Resource Desk	10.3	7.7	9.1	8.5	7.0	7.8	6.8	7.4	7.1	9.0	7.5	8.3
Individual health behavior counseling	6.5	7.1	6.8	6.4	6.5	6.5	4.2	8.5	5.9	5.8	7.3	6.5
Read a member newsletter	58.4	47.0 ^S	53.1	58.7	51.1 ^S	55.3	58.6	50.8	55.6	58.6	48.6 ^S	54.1
Used print health education materials or DVDs	20.9	21.5	21.2	21.9	19.6	20.9	21.0	20.6	20.8	21.1	21.0	21.0

^S = Significant (p<.05) gender difference within age group at p<.05

^W = Significant (p<.05) difference in percentage for same age-gender group between those with Internet access and those without access

^{A1} = Significant (p<.05) age group difference compared to age group below ; ^{A2} = Significant age group difference compared to age 65-74

Table 4. Preferred Methods for Learning About Health, Members Aged 65 and Over in the Northern California Kaiser Permanente Membership, Spring 2011

Preferred Methods for Learning about Health	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Internet/Digital Modalities												
Information from Internet websites	25.1	27.3	26.3	13.3 ^{A1}	16.4 ^{A1}	14.9 ^{A1}	6.9 ^{A1}	11.4 ^{A2}	8.9 ^{A1}	18.2	21.8 ^{A1}	19.5
If has web access	29.4	30.8	30.2 ^W	19.8 ^{A1,W}	22.2 ^{A1,W}	21.0 ^{A1,W}	13.7 ^{A2}	17.0 ^{A2}	15.4 ^{A1,W}	25.1 ^W	26.9 ^W	25.8 ^W
Information from MD home page (all)	22.1	25.7	24.3	16.7 ^{A1}	20.5 ^{A1}	18.7 ^{A1}	9.0 ^{A1}	15.9 ^{A2}	12.0 ^{A1}	18.1	22.7 ^S	19.9
If has web access	26.8	28.9	27.7	23.7 ^W	27.5 ^W	25.6 ^{A1,W}	15.9 ^{A2}	21.4 ^{A2}	18.7 ^{A1,W}	24.3 ^W	27.4 ^W	25.6 ^W
Web/Email-Based Program												
Single session	9.2	8.7	9.0	2.9 ^{A1}	3.8 ^{A1}	3.4 ^{A1}	2.0 ^{A2}	3.9 ^{A2}	2.8 ^{A2}	6.2	6.8	6.4
Multi-session	3.3	5.9	4.5	1.5 ^{A1}	2.5	4.9	0.9 ^{A2}	2.4 ^{A2}	1.6 ^{A2}	2.4	4.5	3.3
If has Internet access												
Single session	10.8	9.9	10.4	4.4 ^{A1}	5.1 ^{A1}	4.8 ^{A1}	4.3 ^{A2}	6.1	5.2 ^{A2}	8.6 ^W	8.4	8.5 ^W
Multi session	3.9	6.6	5.2	2.2	3.2	2.7 ^{A1}	2.0 ^{A2}	3.4 ^{A2}	2.7 ^{A2}	3.3	5.5	4.3
Watch live webinars/talks on kp.org	6.3	7.1	6.7	2.2 ^{A1}	2.9 ^{A1}	2.5 ^{A1}	0.8 ^{A2}	2.2 ^{A2}	1.4 ^{A2}	4.1	5.2	4.5
If has web access	7.5	8.0	7.8	3.0 ^{A1}	3.9 ^{A1}	3.5 ^{A1}	1.2 ^{A2}	3.4 ^{A2}	2.3 ^{A2}	5.6	6.5	6.0 ^W
Watch health videos on kp.org or other websites	11.1	11.2	11.2	6.3 ^{A1}	7.0 ^{A1}	6.7 ^{A1}	3.1 ^{A2}	4.4 ^{A2}	3.7 ^{A1}	8.1	8.9	8.4
If has web access	13.0	12.5	12.8	8.8 ^{A1}	9.4	9.1 ^{A1,W}	6.1 ^{A2}	6.6 ^{A2}	6.4 ^{A2}	11.1 ^W	10.9	11.0 ^W
Podcasts and online audio programs	2.3	4.1	3.1	0.9	1.0 ^{A1}	0.9 ^{A1}	0.3 ^{A2}	1.0 ^{A2}	0.6 ^{A2}	1.5	2.8	2.1
If has web access	2.6	4.6	3.6	1.3	1.3 ^{A1}	1.3 ^{A1}	0.7	1.5 ^{A2}	1.1 ^{A2}	2.1	3.5	2.7

^W = Significant difference in percentage for same age-gender group between those with Internet access and those without access

^E = Significant difference in percentage for same age-gender group between those with email access and those without access

^T = Significant difference in percentage for same age-gender group between those with access to text messaging and those without access

^S = Significant gender difference within age group at p<.05

^{A1} = Significant age group difference compared to age group below; ^{A2} = Significant age group difference compared to age 65-74

Table 4. Preferred Methods for Learning About Health, Members Aged 65 and Over in the Northern California Kaiser Permanente Membership, Spring 2011

	65-74 yr			75-79 yr			80 yr and over			65 yr and over		
Preferred Methods for Learning about Health	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %	Women %	Men %	All %
Digital Modalities (contd)												
Emailed health newsletters and tip sheets	28.8	29.8	29.4	16.4 ^{A1}	22.7 ^{A1,S}	19.5 ^{A1}	11.1 ^{A1}	16.1 ^{A1}	13.4 ^{A1}	22.0	23.5	23.6
If has email access	34.4 ^E	34.2	34.4 ^E	24.1 ^E	29.9 ^E	26.9 ^E	20.2 ^{A2,E}	24.7 ^{A2}	22.3 ^{A2,E}	30.0 ^E	31.9 ^E	30.9 ^E
Secure email communications	22.3	21.6	22.0	13.6 ^{A1}	15.3 ^{A1}	14.6 ^{A1}	5.1 ^{A1}	8.9 ^{A1}	6.7 ^{A1}	16.1	17.6	16.5
If has email access	26.9	25.0	26.0 ^E	20.5 ^{A1,E}	21.2 ^E	20.9 ^{A1,E}	10.7 ^{A1}	14.6 ^{A1}	12.5 ^{A1,E}	22.8 ^E	22.5 ^E	22.6 ^E
Text messages	5.2	3.8	4.6	1.7 ^{A1}	2.5	2.1	1.2 ^{A2}	1.9	1.5 ^{A2}	3.5	3.2	3.3
If can get text messages	11.5 ^T	7.8 ^T	9.7 ^T	5.8 ^T	5.3	5.6 ^T	3.1 ^{A2}	6.7	5.0	9.9 ^T	7.3 ^T	8.6 ^T
Use an interactive computer program	7.4	12.6 ^S	9.8	2.8 ^{A1}	6.4 ^{A1,S}	4.4 ^{A1}	1.8 ^{A2}	3.8 ^{A2}	2.6 ^{A2}	5.0	9.4 ^S	7.0
If has computer access	8.6	14.3	11.3	4.2 ^{A1}	8.6 ^{A1,S}	6.3 ^{A1}	3.1 ^{A2}	6.3 ^{A2}	4.6 ^{A2}	6.9	11.9 ^S	9.3
Non-Digital Modalities												
Individual counseling	28.8	27.1	28.0	21.9 ^{A1}	21.1 ^{A1}	21.6 ^{A1}	19.0 ^{A2}	23.9	20.9 ^{A1}	24.8	25.2	25.0
Brief individual telephone counseling sessions	27.3	21.6	24.6	23.6	21.3	22.6	20.4 ^{A2}	19.9	20.2 ^{A2}	24.7	21.1	23.1
Small group appointments	14.9	12.1	13.6	11.0 ^{A1}	8.3 ^{A1}	9.8 ^{A1}	6.9 ^{A2}	9.3	7.9 ^{A1}	12.0	10.7	11.4
One session workshop	14.2	10.0	12.3	10.2 ^{A1}	6.0 ^{A1}	8.3 ^{A1}	5.5 ^{A2}	7.3	6.2 ^{A1}	11.1	8.7	10.0
Multi-session in person class/group	8.9	8.3	8.6	8.4	4.3 ^{A1}	6.6	3.4 ^{A2}	6.4	4.6 ^{A1}	7.3	7.1	7.2
Multi-session phone-in group program	0.6	1.3	1.0	0.8	0.2	0.5	0.5	1.2	0.8	0.6	1.1	0.9
Watch DVDs at home	10.4	10.2	10.3	8.6	9.6	9.1	5.5	9.8	7.2 ^{A2}	8.7	10.0	9.3
Health newsletters and tip sheets mailed to home	30.2	26.0	28.3	43.4 ^{A1}	29.6 ^S	37.2 ^{A1}	42.1 ^{A2}	38.1 ^{A2}	40.6 ^{A1}	35.9	29.4 ^S	33.1

^W = Significant difference (p<.05) in percentage for same age-gender group between those with Internet access and those without access

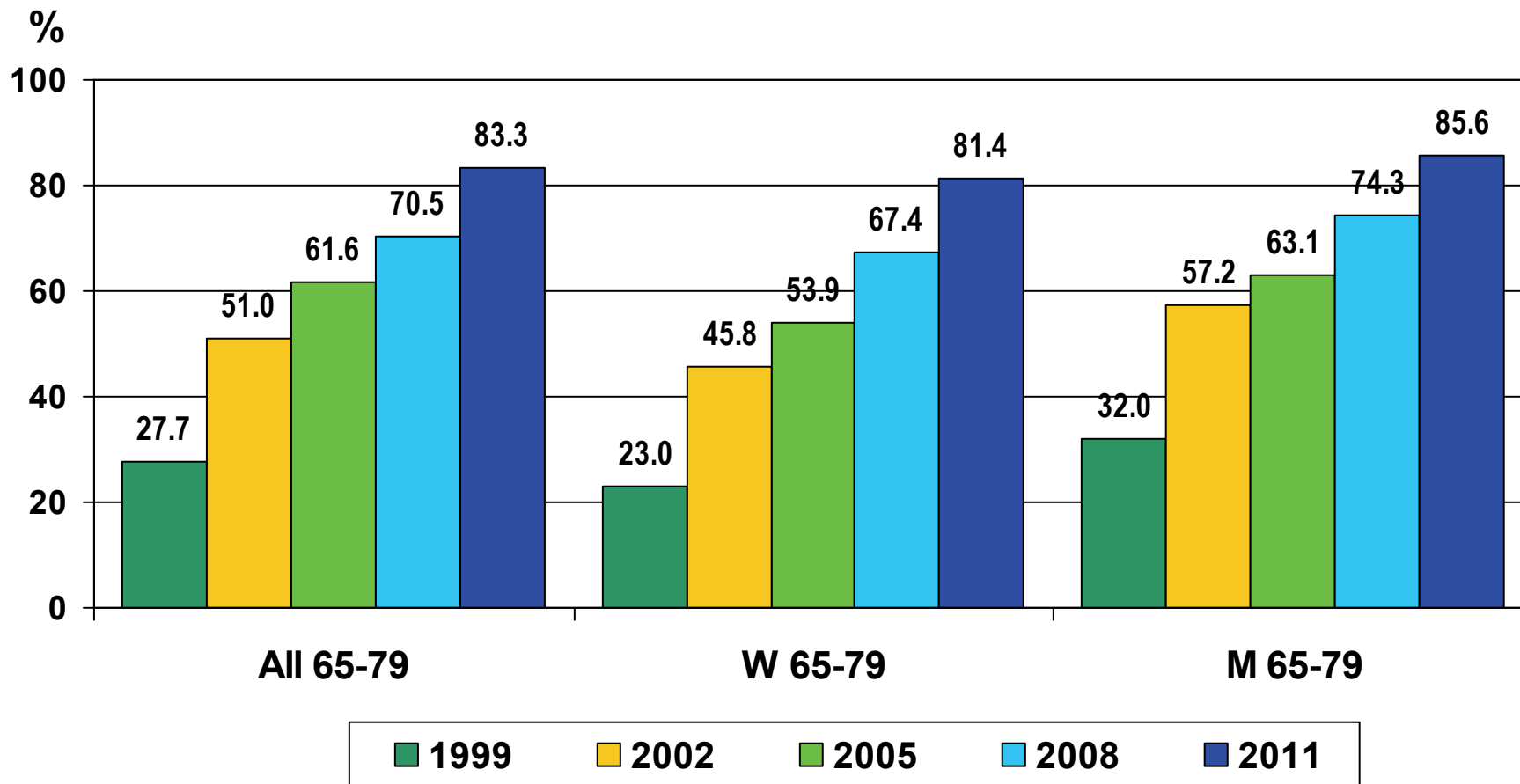
^E = Significant difference (p<.05) in percentage for same age-gender group between those with email access and those without access

^T = Significant difference (p<.05) in percentage for same age-gender group between those with access to text messaging and those without access

^S = Significant (p<.05) gender difference within age group at p<.05

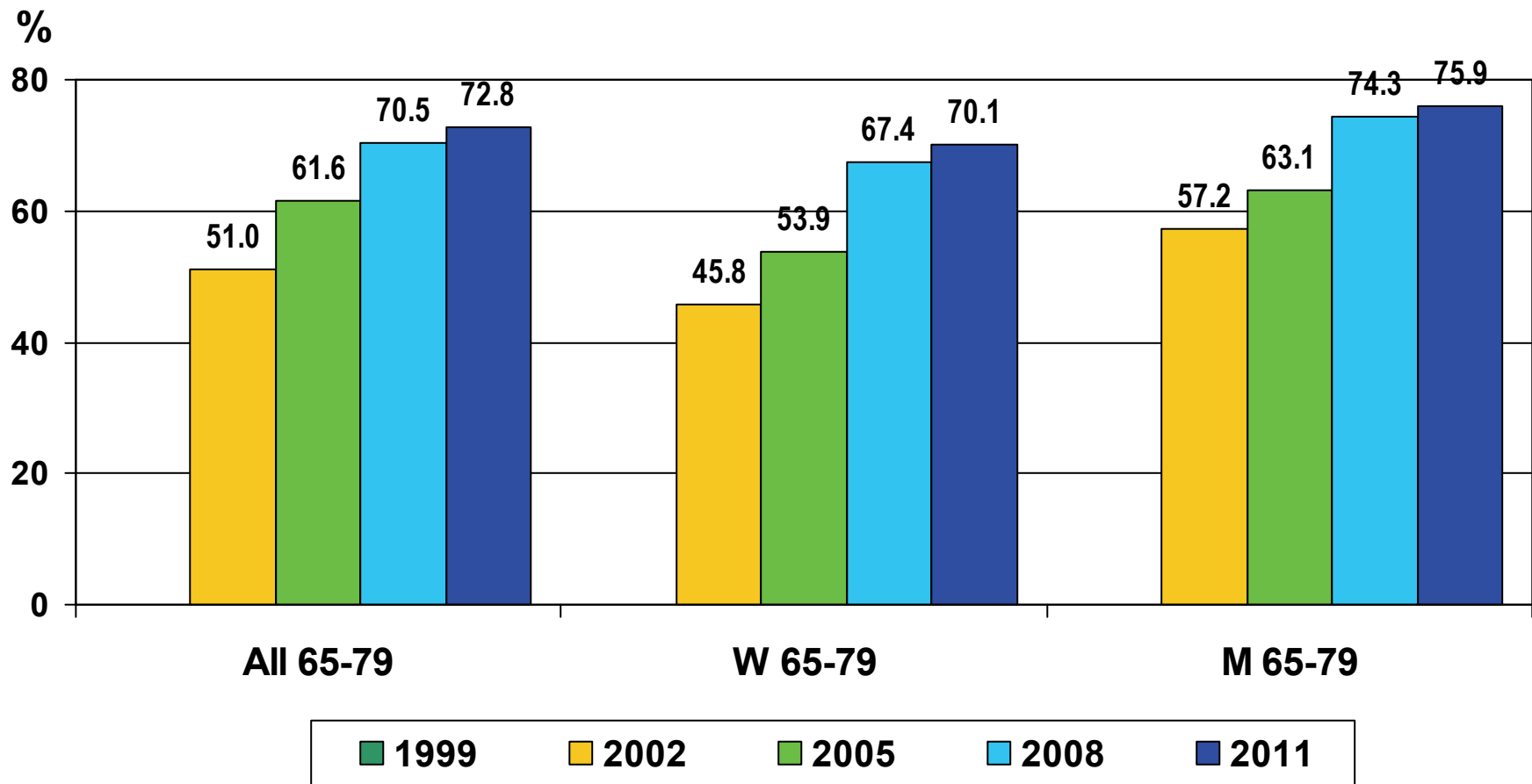
^{A1} = Significant (p<.05) age group difference compared to age group below; ^{A2} = Significant age group difference compared to age 65-74

Percentages of KP-NCal Members Aged 65-79 Who Had Access to Internet from Any Location, 1999-2011



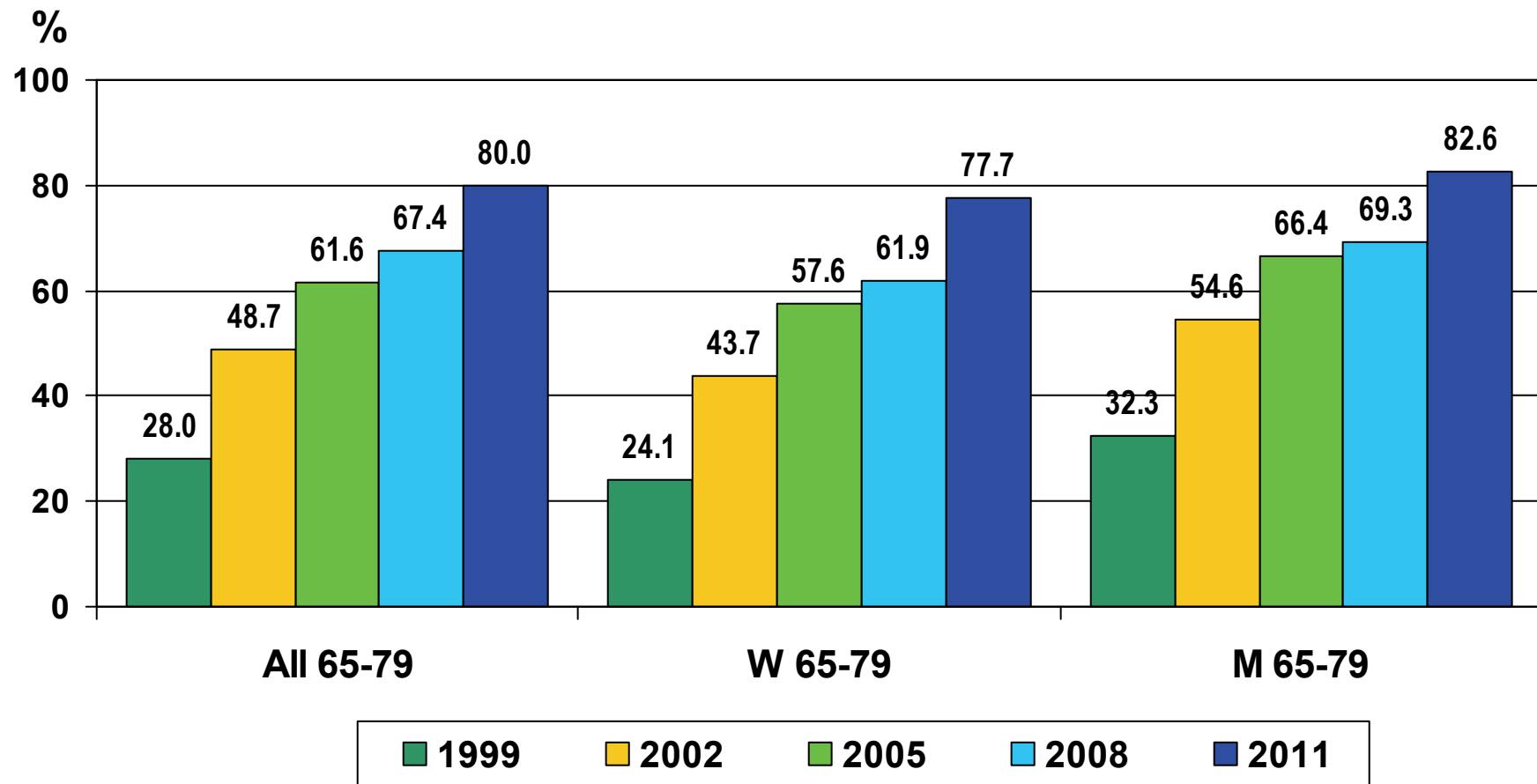
Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey.

Percentages of KP-NCal Members Aged 65-79 Who Had Access to Internet from Home 1999-2011



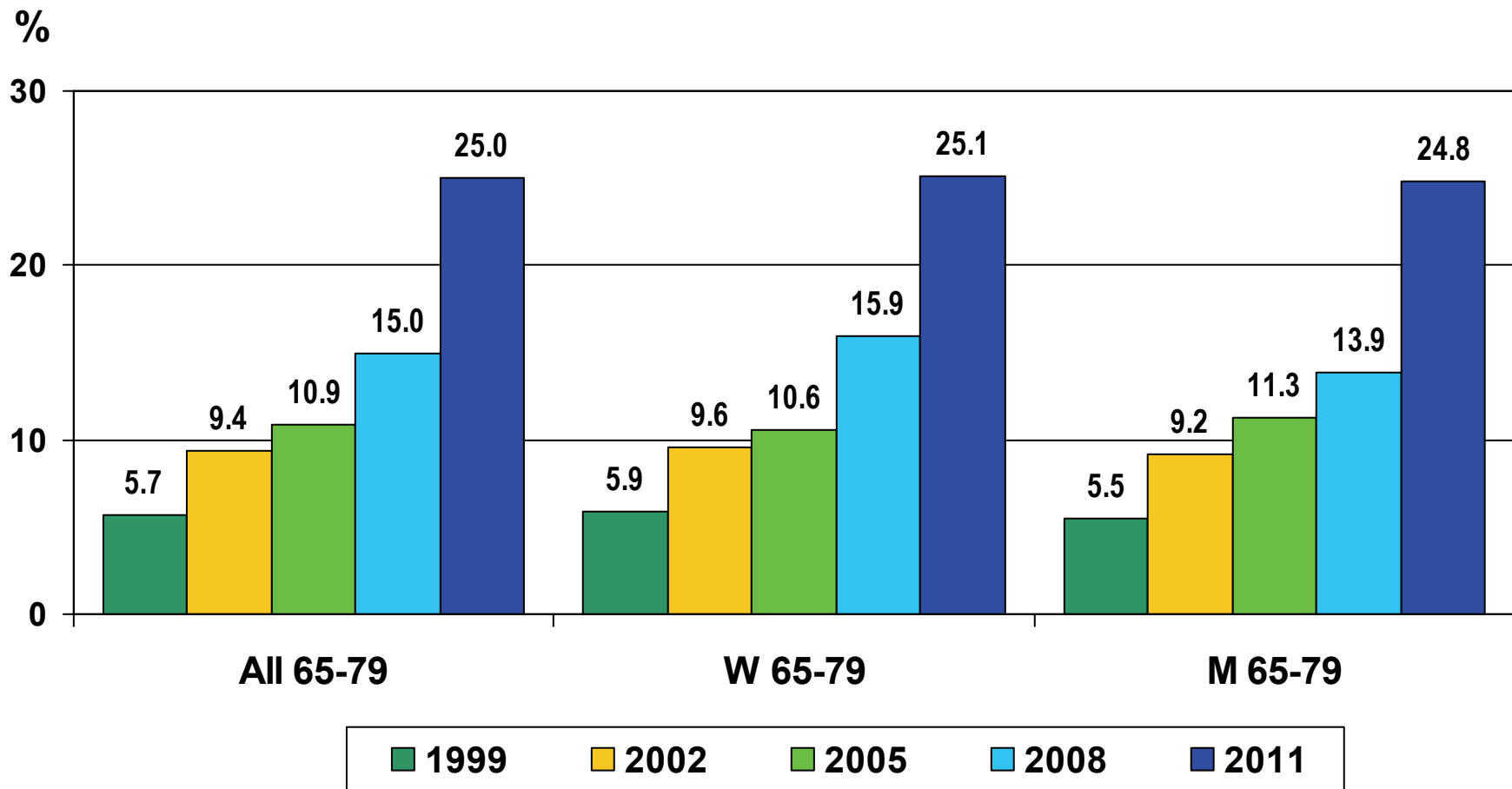
Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey. Not ascertainable from 1999 survey.

Percentages of KP-NCal Members Aged 65-79 Who Had Access to Email, 1999-2011



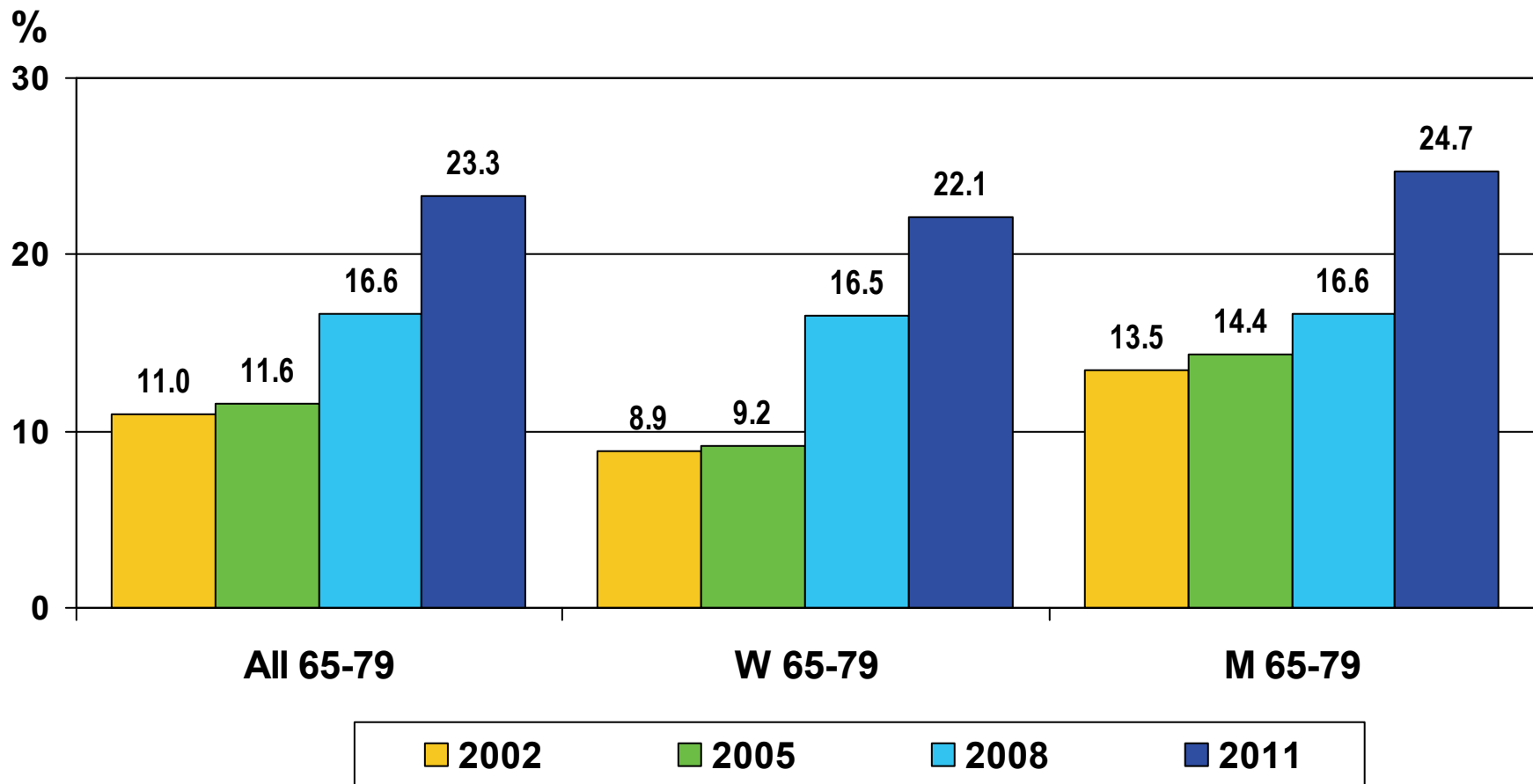
Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey.

Percentages of KP-NCal Members Aged 65-79 Who Got Health Information from the Web in Past 12 Mos., 1999-2011



Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey.

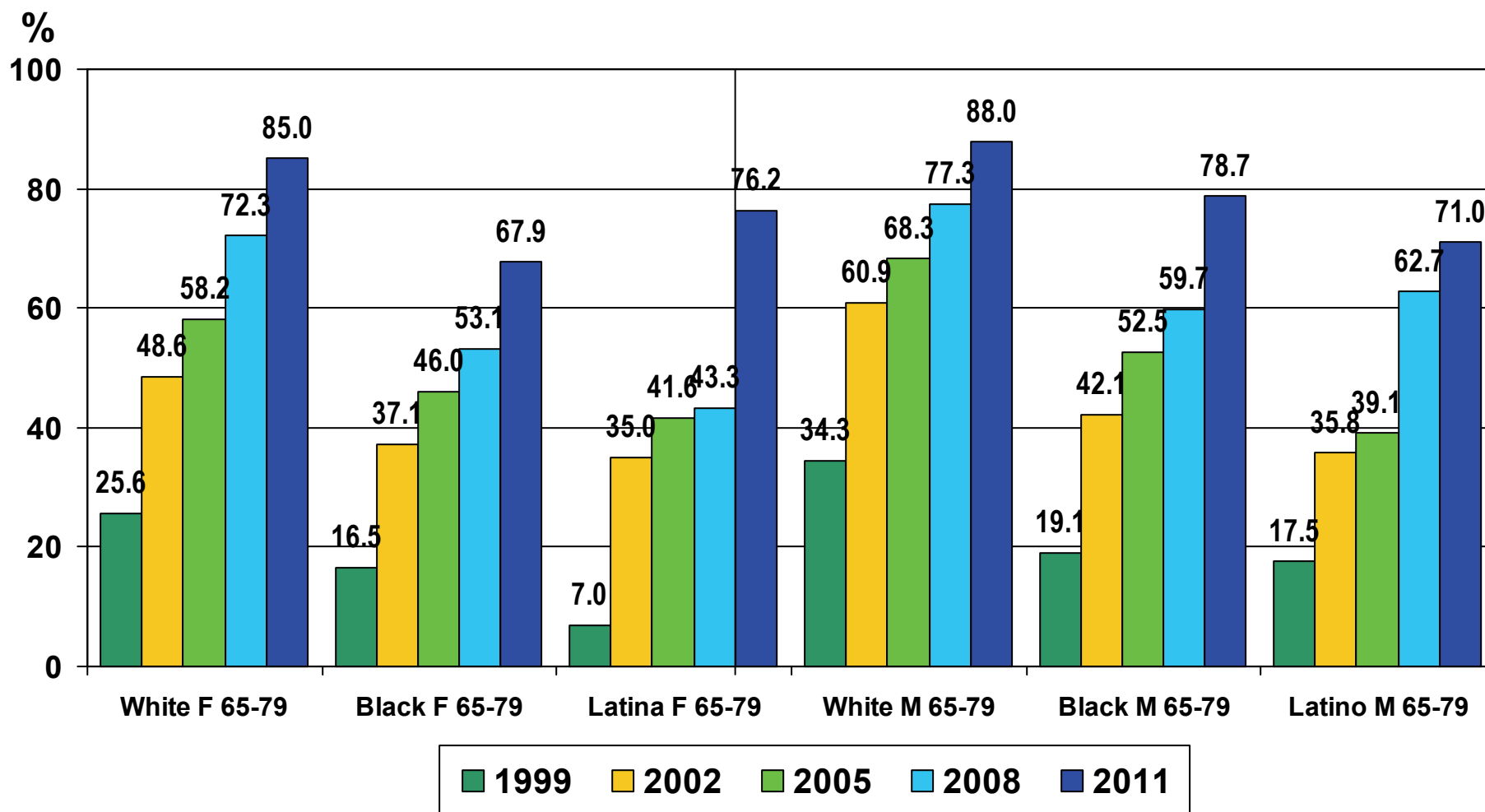
Percentages of KP-NCal Members Aged 65-79 Who Want to Get Health Information from Websites, 2002-2011



Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey.

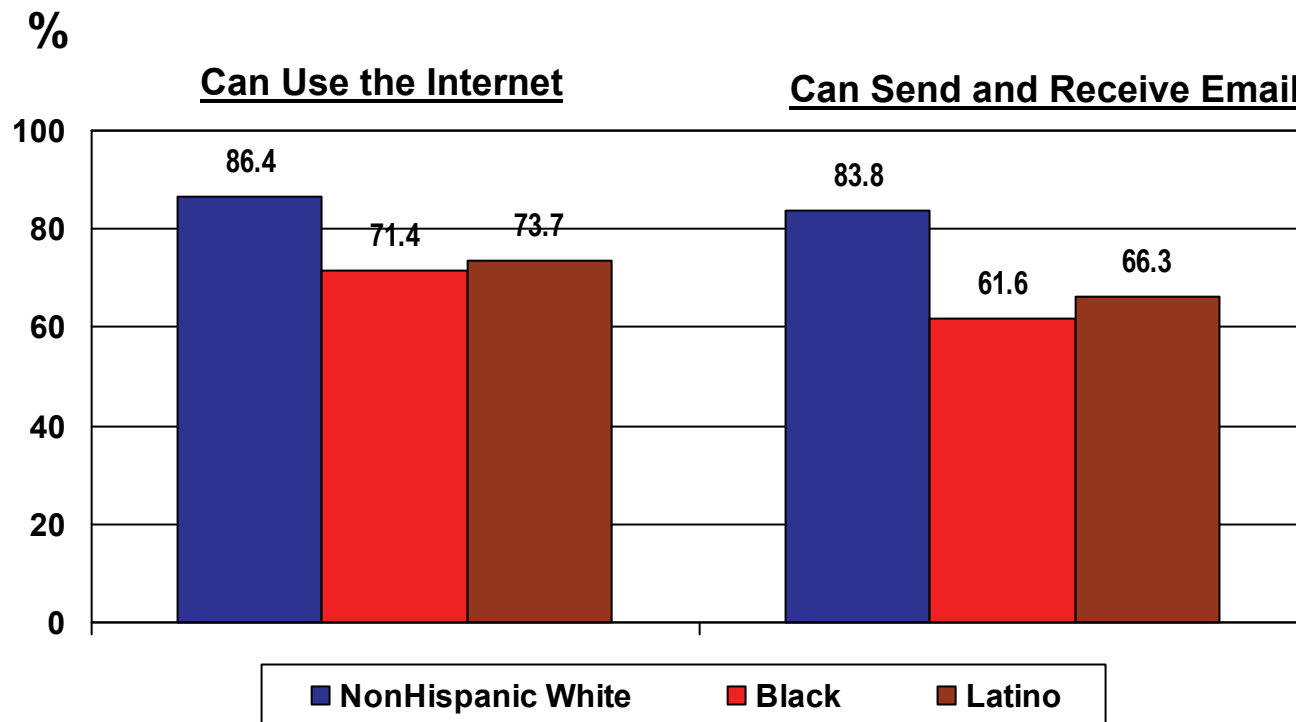
**Differences by Race-Ethnicity, Education, and Income
in Ability to Use and Preference for Using
the Internet and Email for
Health-Related Information and Communications,
KPNC Members Aged 65-79 in 2011**

Internet Access from Home/Other Location, 1999-2011, KP-NCal nonHispanic White, Black, and Latino Members Aged 65-79



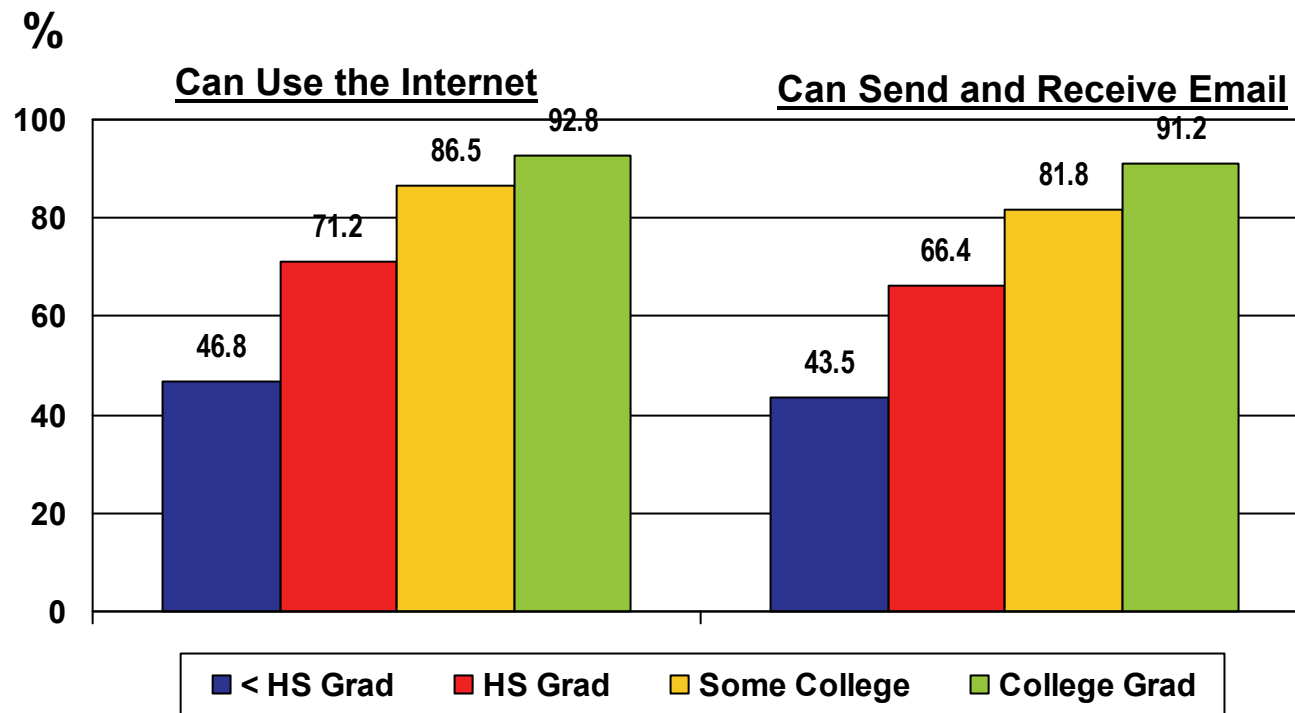
Estimated from Kaiser Permanente-NCal Member Health Surveys, each year weighted to the age-gender and geographic composition of the adult membership at the time of the survey.

Percentages of nonHispanic White, Black, and Latino KP-NCal Members Aged 65-79 Who Can Use the Internet and Email, 2011



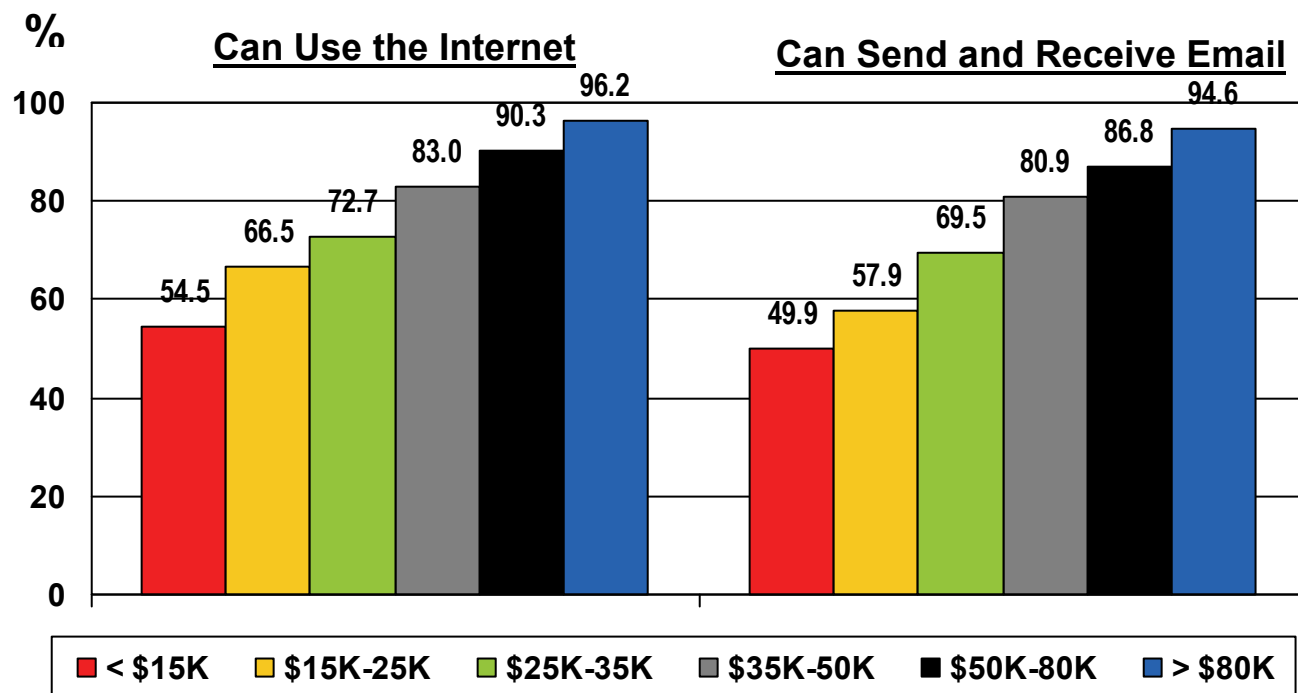
Estimated using self-report data from the 2011 Kaiser Permanente-NCal Member Health Survey, weighted to the age-gender-geographic composition of the membership in 2011. Percentages for Whites significantly higher than for Blacks, Latinos ($p < .05$). Among Blacks, women significantly less likely to be email users than men

Percentages of KP-NCal Members Aged 65-79 Who Can Use the Internet and Email, by Level of Education, 2011



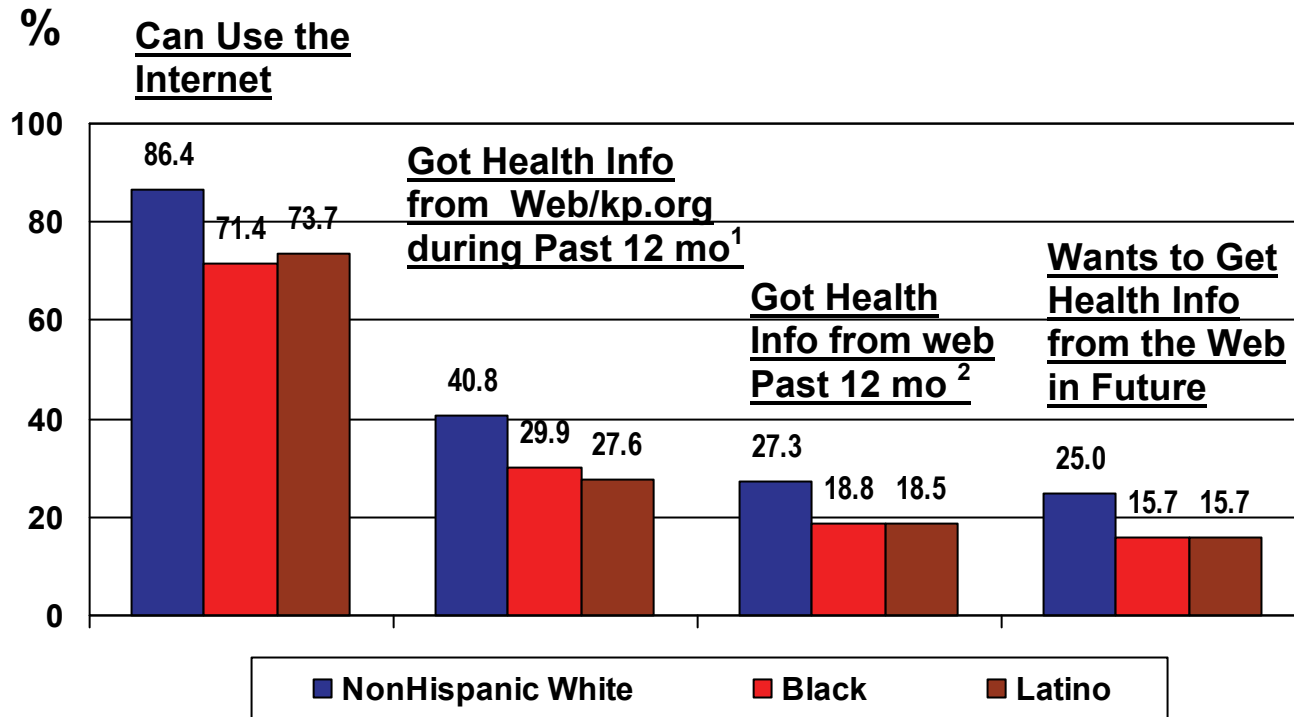
Estimated using self-report data from the 2011 Kaiser Permanente-NCal Member Health Survey, weighted to the age-gender-geographic composition of the membership in 2011. Percentages significantly increase with level of education.

Percentages of KP-NCal Members Aged 65-79 Who Can Use the Internet and Email, by Household Income, 2011



Estimated using self-report data from the 2011 Kaiser Permanente-NCal Member Health Survey, weighted to the age-gender-geographic composition of the membership in 2011. Percentages significantly increase with level of income.

Percentages of nonHispanic White, Black, and Latino KP-NCal Members Aged 65-79 Who Can and Want to Use the Internet to Get Health Information, 2011



Estimated using self-report data from the 2011 Kaiser Permanente-NCal Member Health Survey, weighted to the age-gender-geographic composition of the membership in 2011. Percentages for Whites significantly higher than for Blacks, Latinos ($p < .05$)

¹ Health info from website (incl. kp.org items); ² Health info from website (not incl. kp.org items)

Percentages of KP-NCal Members Aged 65-79 Who Can and Want to Use the Internet to Get Health Information, by Level of Education, 2011

