Healthcare Using New Technologies (HUNT):
A survey to assess seniors' readiness to use web-based methods of communicating about health and with the health care system

The Internet offers great potential as a resource for obtaining health information, a means of communicating with one's health care providers, and a tool for managing health. Because of the potential for improving health care related communications with their members and avoiding escalating costs of traditional mail, many health care organizations, including Kaiser Permanente, are making heavy investments in web-based applications. However, recent surveys have found that seniors are less likely than young and middle-aged adults to have access to a home computer and the Internet and less likely to use the Internet for obtaining information concerning their health, and that Latino seniors are less likely than same-age White seniors to be Internet-ready.

To investigate the extent to which seniors have Internet access and have embraced the Internet as a vehicle for health care communication, we surveyed a random sample of African-American and Latino men and women aged 65-79 and nonHispanic White men and women aged 65-85 who were members of the Kaiser Permanente Medical Care Program in Northern California in first quarter 2008. The survey, called HUNT (Healthcare Using New Technologies), was conducted by mailed questionnaire with the option of taking the survey online. The project was funded by Kaiser Permanente's Northern California Region Community Benefit Program.

A specific aim of the survey was to identify disparities related to age, race/ethnicity, gender, and education regarding Internet access as well as preferences for using different types of Internet-based health communication. We wanted to determine if these disparities might result in reduced access to care for segments of the senior population if the trend toward shifting administrative information, forms, health information, and health care services onto websites continues. To accomplish this aim, the survey sample was special designed to capture information from adequate numbers of White, African-American, and Latino men and women in different age groups (65-69, 70-74, 75-79, and for Whites, 80-85) to make robust comparisons across these different segments of the membership.

We expected that senior health plan members would trust the Kaiser Permanente website to be free of computer viruses and not sell their email addresses to other companies for advertising purposes. Additionally, because Internet service is readily available to purchase in most communities where our Northern California members reside, as well as free at many public locations, this member population provides an excellent laboratory for studying seniors' use of the Internet for healthcare-related functions under the best of circumstances. Our goal is to inform policy and planning regarding computer use and technology on the part of all organizations and agencies whose constituencies include seniors.

Study sample:

  Stratified random sample (gender x age x level of education) within race/ethnic groups. People identified from previous Member Health Surveys (MHS), with African-American and Latino groups supplemented by members identified from the Senior Health Appraisal/SEEK dataset

Response rates by race/ethnicity:

  WhiteNH, 71.2% , AA, 42.7%, and Latino, 48.9%
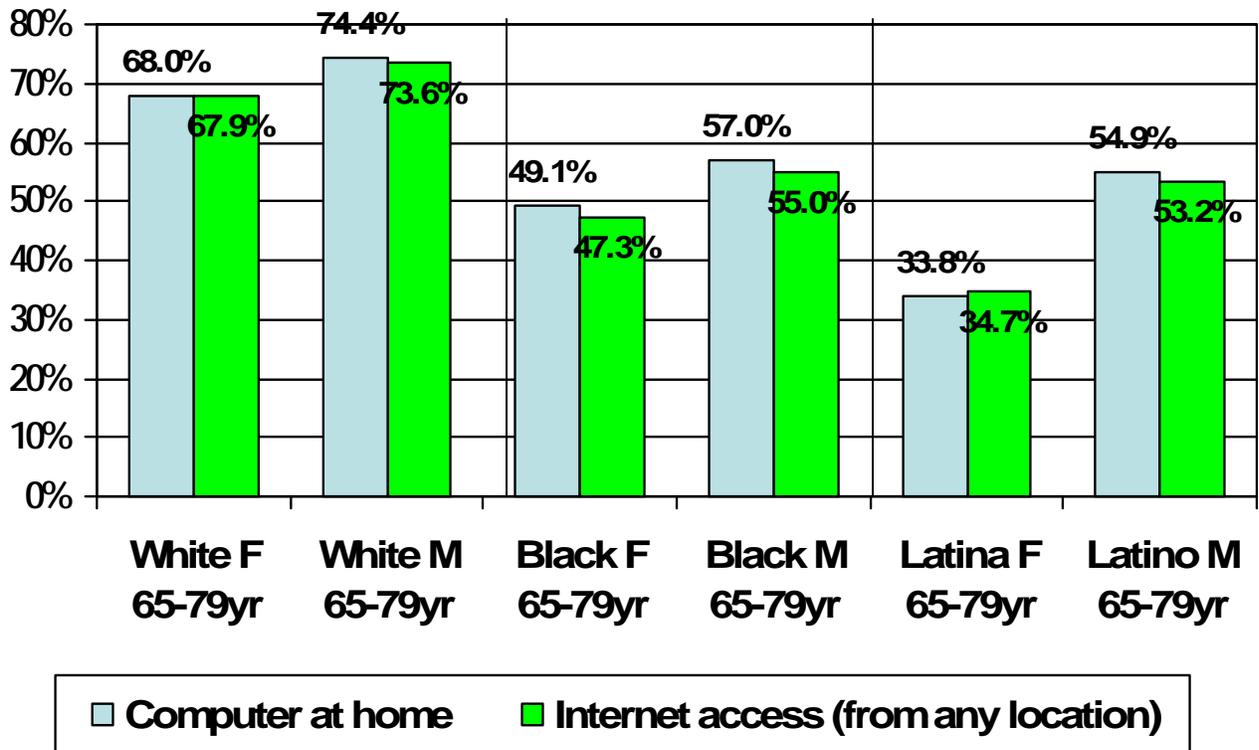
Final respondent sample:

- White nonHispanic: 1082 Women, 1131 Men (65-85 yr)
- African-Amer./Black: 794 Women, 675 Men (65-79 yr)
- Latino: 916 Women, 790 Men (65-79 yr)

- Respondent data were weighted to the age, gender, and education level for their race/ethnic group (as estimated by the 2005 KPNC Member Health Survey)

Percentage of the KPNC Adult Membership Aged 65 and Over in 2008
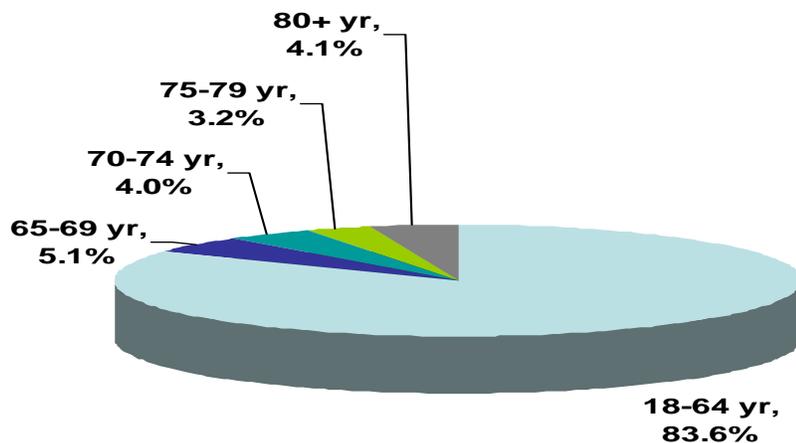
Percentages of Seniors with Computer at Home and Internet Access from Any Location, Spring 2008

Computer at home   **Internet access (from any location)**

Internet Access (from Any Location) by Age

White F   Black F   Latino F
White M   Black M   Latino M
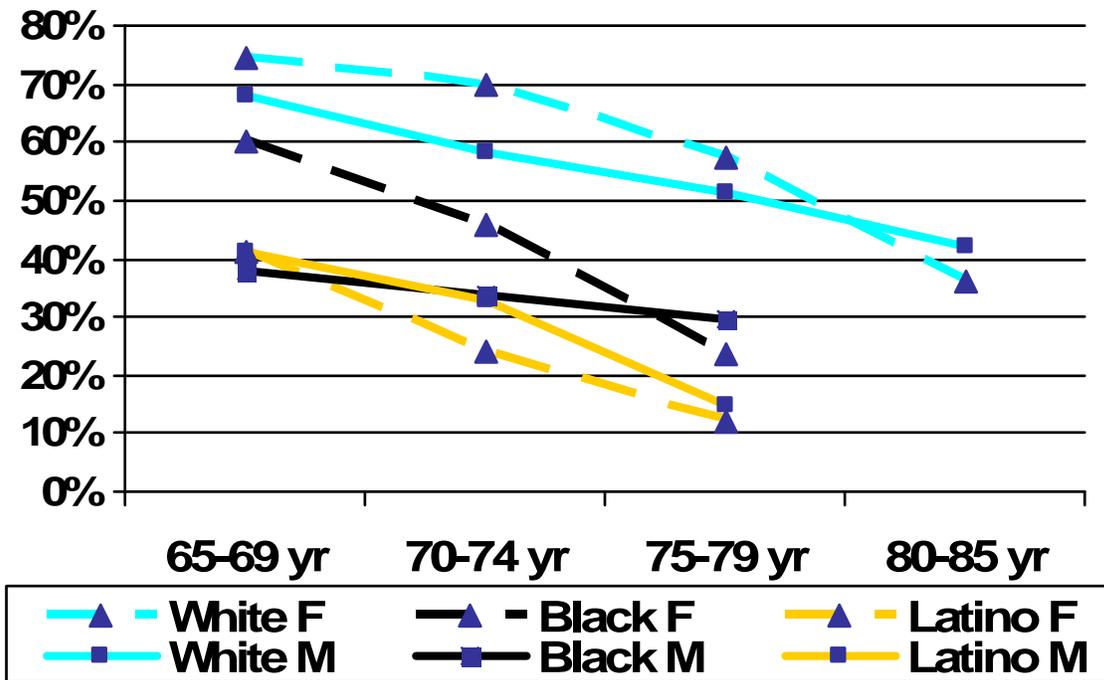
Percentages of Seniors with Internet Access by Level of Education, Spring 2008

Legend:
- White F 65-79yr
- White M 65-79yr
- Black F 65-79yr
- Black M 65-79yr
- Latina F 65-79yr
- Latino M 65-79yr
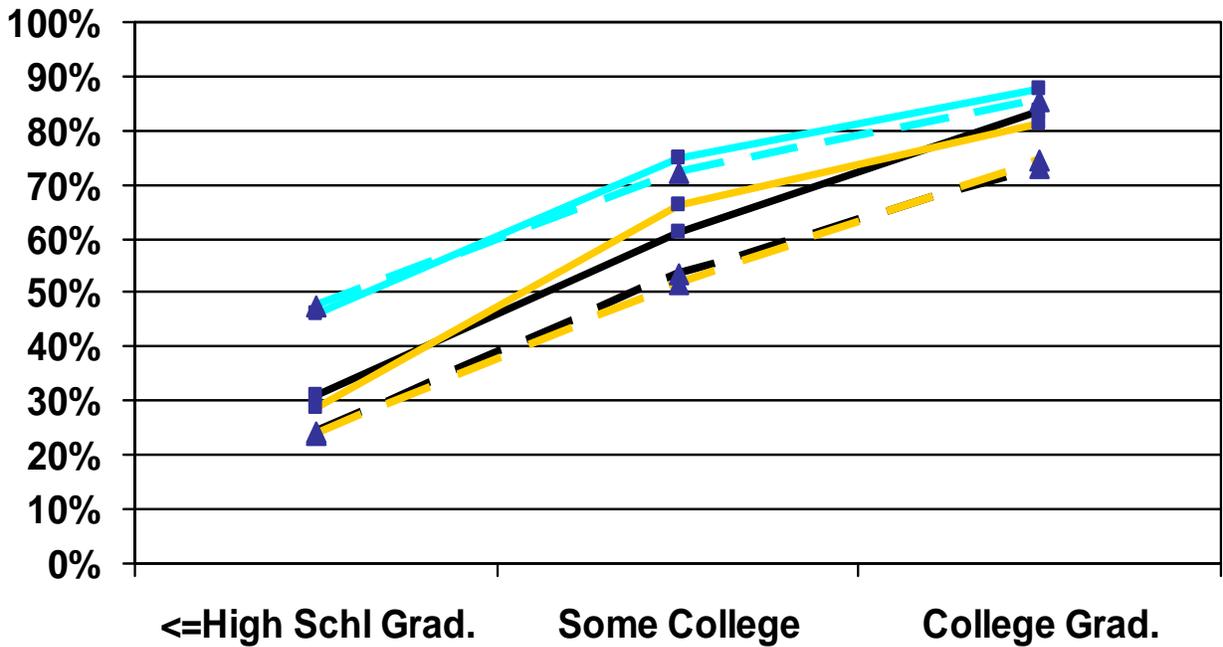
By Education within Age Group, Whites Only

Legend:
- M+F 65-69yr
- M+F 70-74 yr
- M+F 75-79yr
- M+F 80-85yr
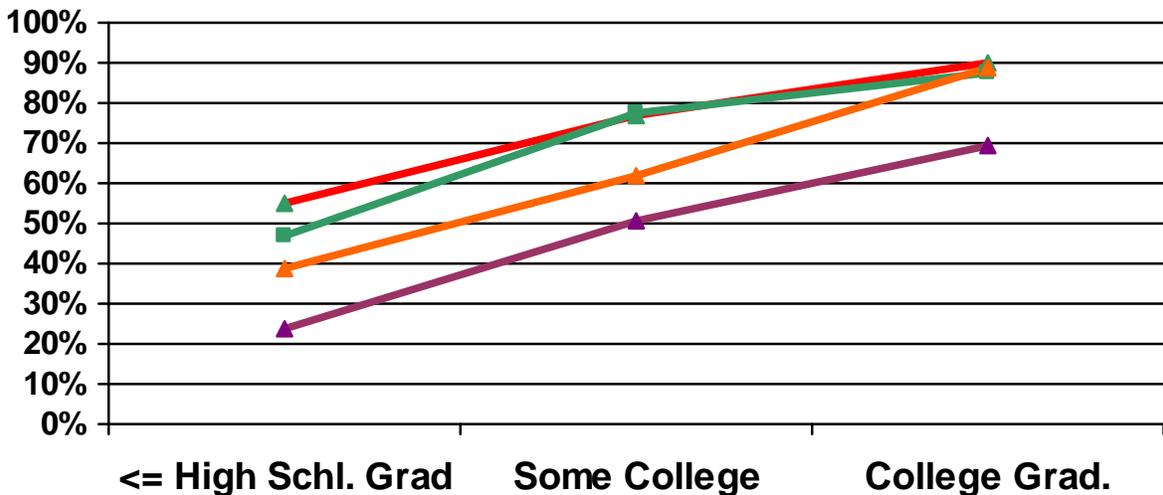
Percentages of Seniors Who Think They Could Easily Get to a URL Printed in a Letter, Spring 2008

Legend:
- All (cyan)
- Those with Internet Access (green)

Values:
- White F 65-79: 43.9% / 64.4%
- White M 65-79: 52.9% / 71.8%
- Black F 65-79: 25.8% / 54.4%
- Black M 65-79: 34.0% / 61.3%
- Latina F 65-79: 17.6% / 51.1%
- Latino M 65-79: 33.5% / 62.2%

Could Easily Get to a URL, by Age (All)

Legend:
- White F, Black F, Latina F
- White M, Black M, Latino M

X-axis: 65-69 yr, 70-74 yr, 75-79 yr, 80-85 yr
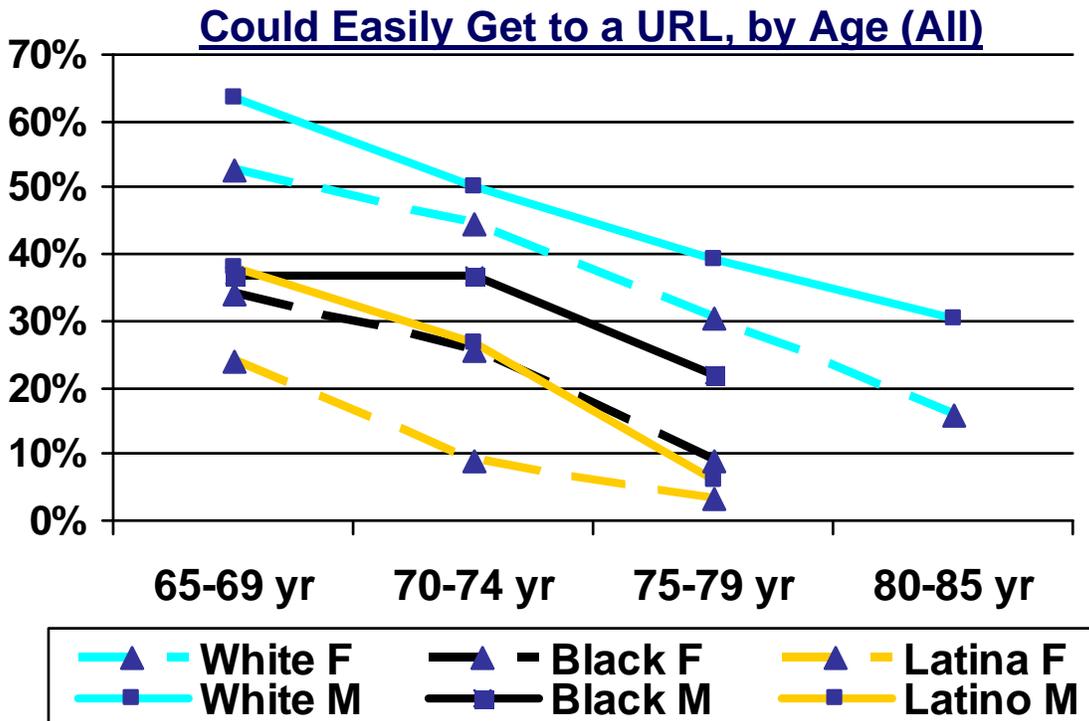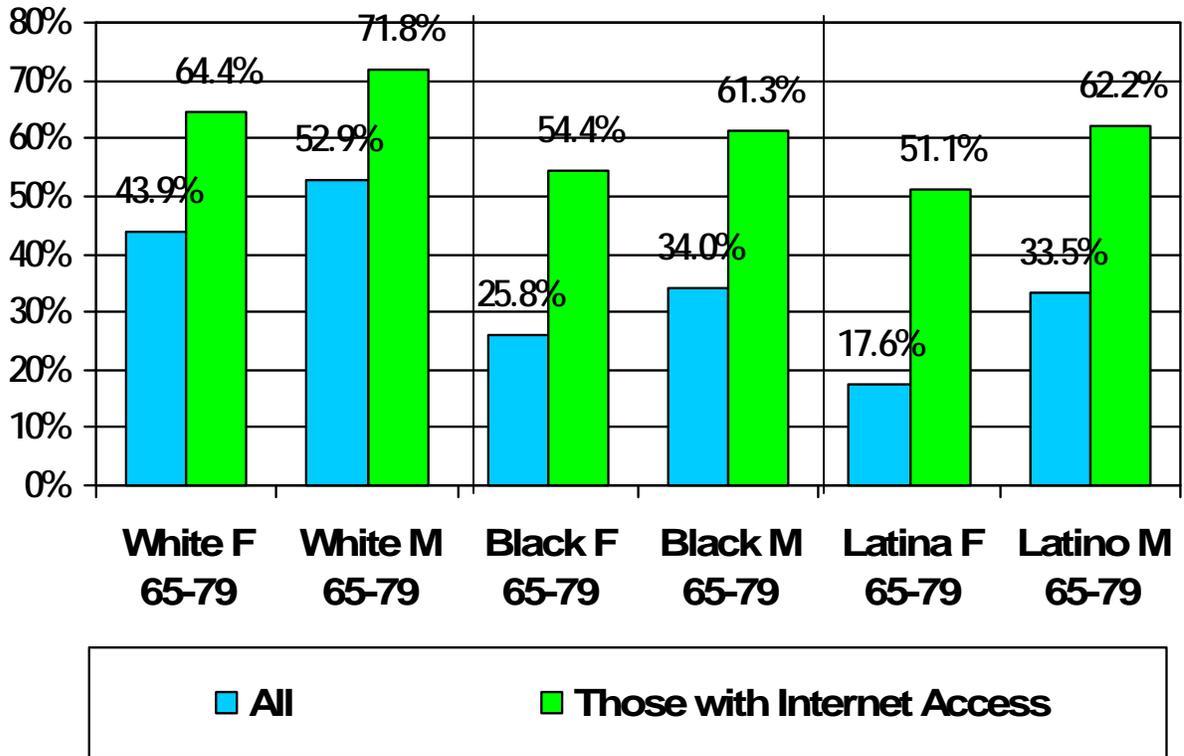
Percentages of Seniors Who Think They Could Easily Complete a Short Form Online, Spring 2008

Bar chart data:

Group	All	Those with Internet Access
White F 65-79	46.0%	67.6%
White M 65-79	54.1%	73.4%
Black F 65-79	25.4%	53.5%
Black M 65-79	35.4%	63.4%
Latina F 65-79	18.3%	53.1%
Latino M 65-79	34.8%	64.6%

Legend: ☐ All   ☐ Those with Internet Access
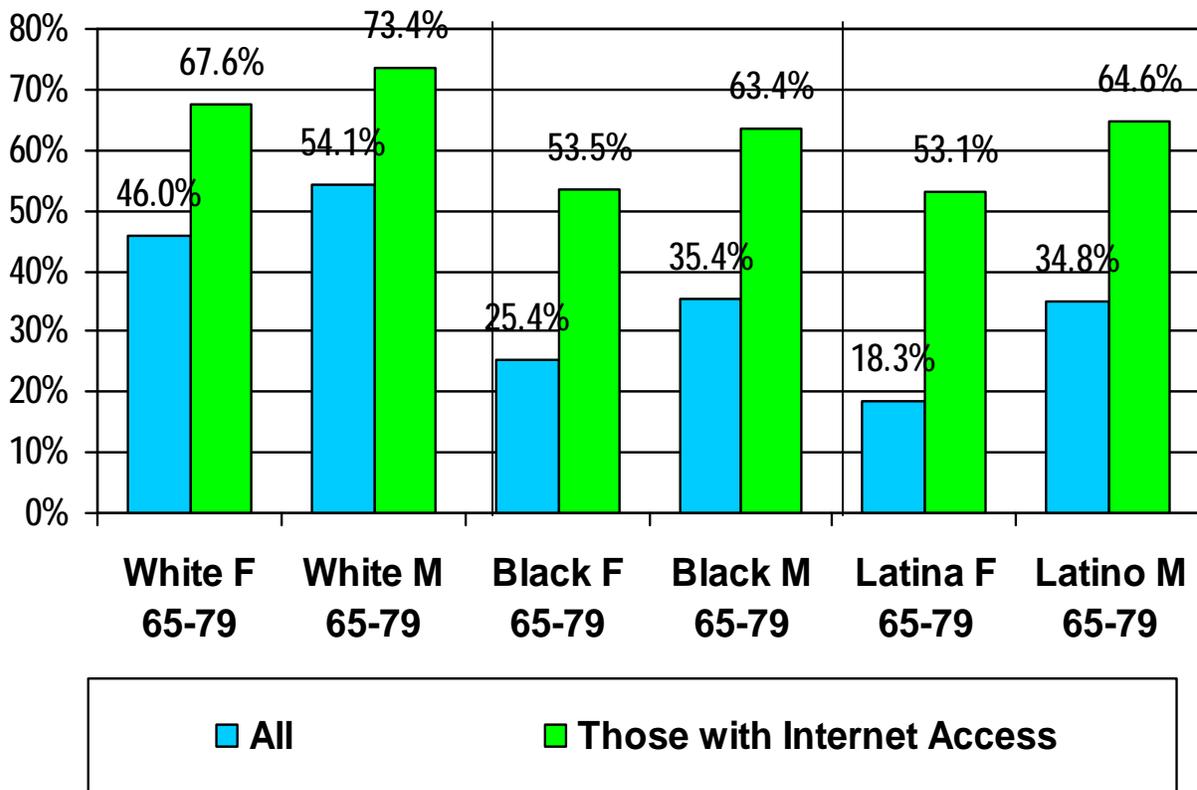
Could Easily Complete Short Form Online, by Age (All)

Line chart x-axis: 65-69 yr, 70-74 yr, 75-79 yr, 80-85 yr

Legend: White F, Black F, Latina F, White M, Black M, Latino M
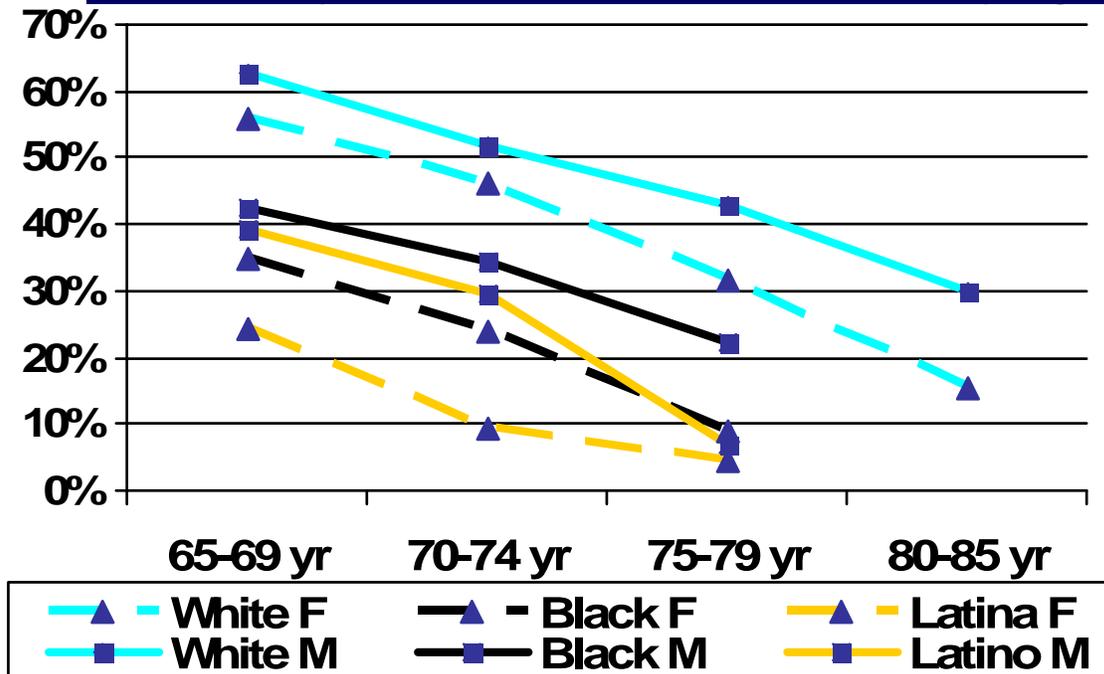
Percentages of Seniors Who Think They Could Easily Email a Doctor through kp.org, Spring 2008

	White F 65-79yr	White M 65-79yr	Black F 65-79yr	Black M 65-79yr	Latina F 65-79yr	Latino M 65-79yr
All	46.1%	54.9%	28.4%	37.0%	19.4%	35.2%
Those with Internet Access	67.7%	74.5%	59.9%	66.3%	56.2%	65.2%
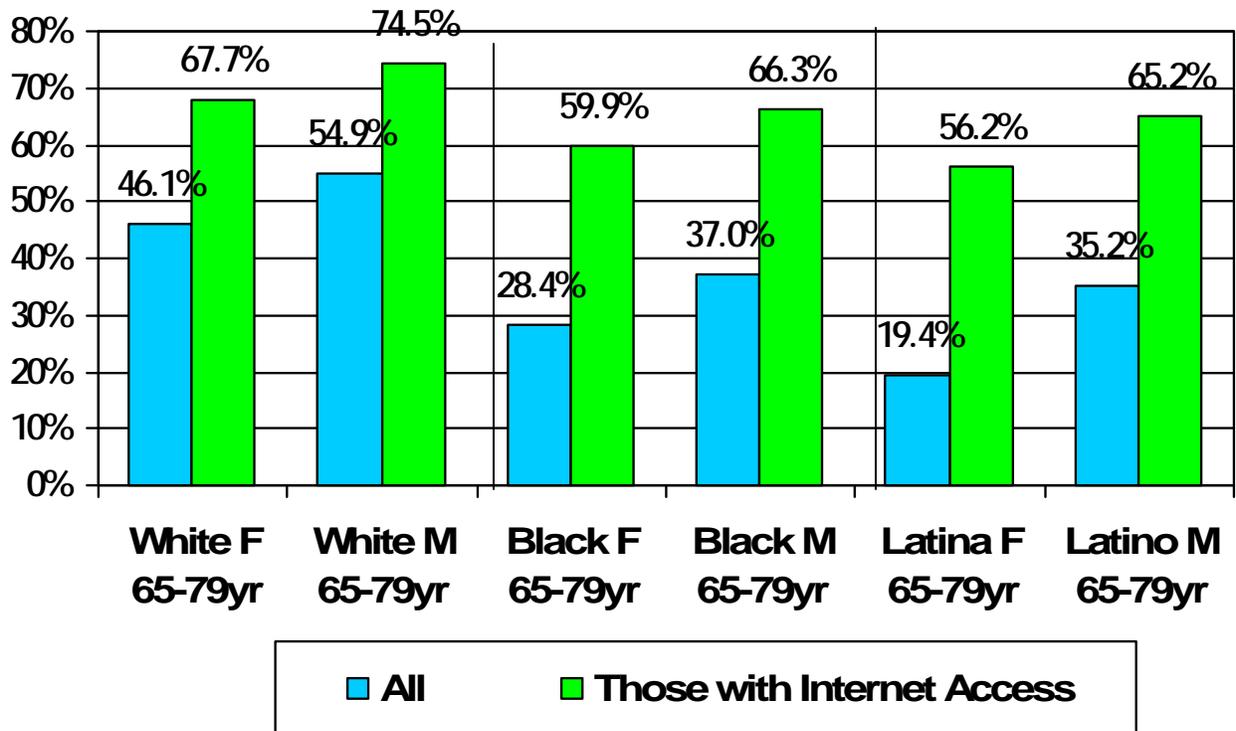
Could Easily Email Doctor via kp.org, by Age (All)
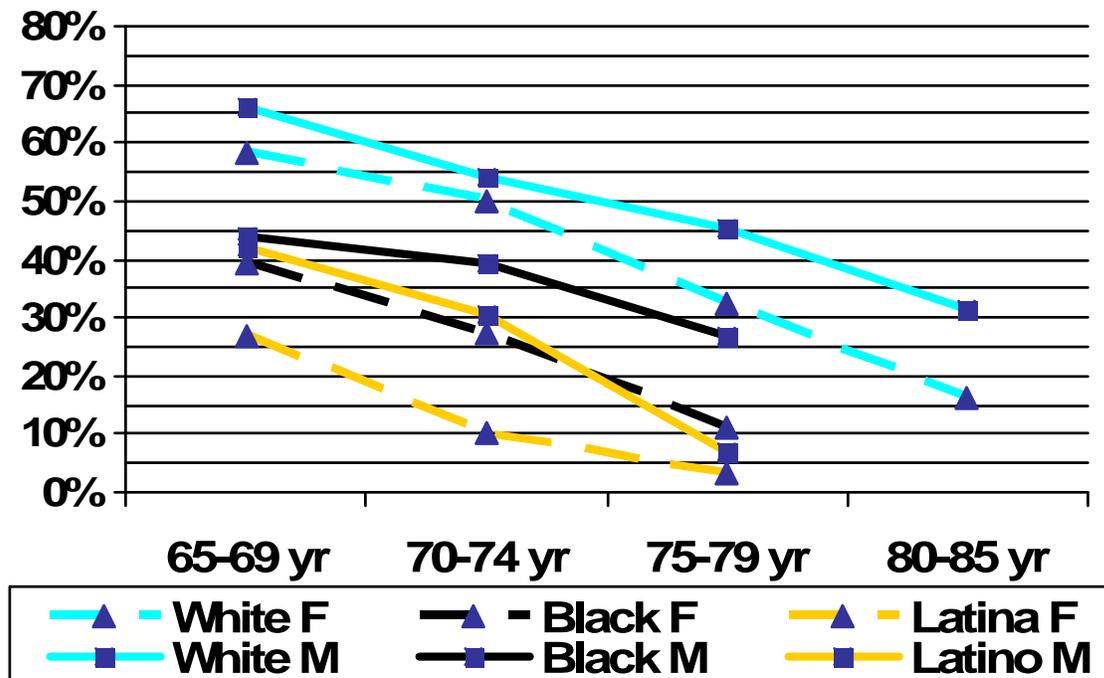
Percentages of Seniors Who Can Watch a Video on a DVD Player vs. on Computer or Online, Spring 2008

Bar chart legend:
- On DVD Player
- On Computer
- Online

Group	On DVD Player	On Computer	Online
White F 65-79yr	72.5%	31.4%	26.4%
White M 65-79yr	79.0%	43.4%	36.1%
Black F 65-79yr	74.5%	26.0%	19.9%
Black M 65-79yr	81.0%	37.7%	26.8%
Latina F 65-79yr	70.3%	15.3%	11.3%
Latino M 65-79yr	77.2%	32.7%	23.8%
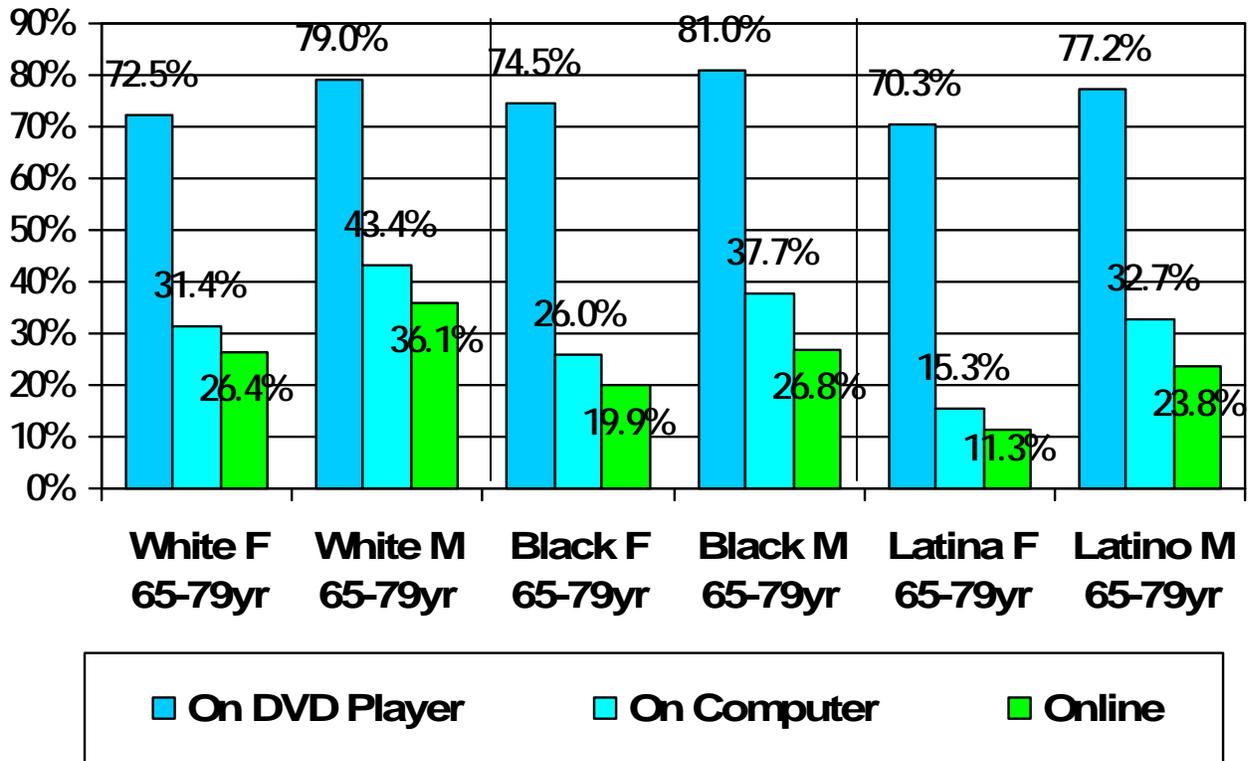
Can Watch a Video Online, by Age

Line chart legend:
- White F
- Black F
- Latina F
- White M
- Black M
- Latino M

X-axis: 65-69 yr, 70-74 yr, 75-79 yr, 80-85 yr
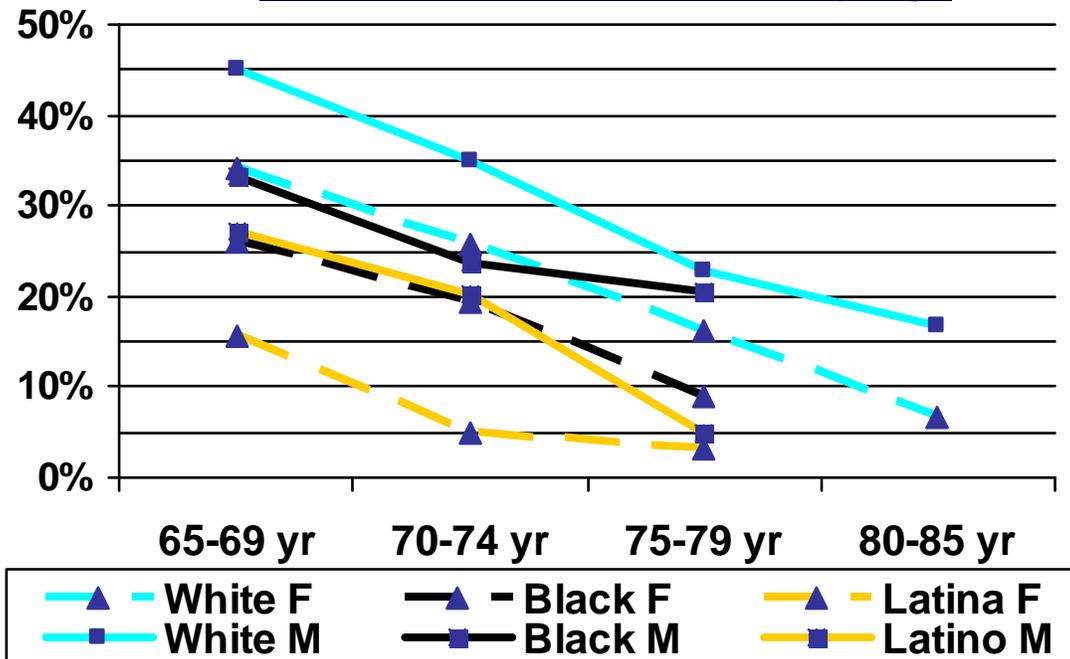
Differences in Percentages of Seniors Who Can Listen on a CD Player vs. to a Podcast, Spring 2008

Bar chart legend: CD on a CD Player (blue), Podcast (green)

Group	CD on a CD Player	Podcast
White F 65-79yr	50.7%	8.8%
White M 65-79yr	59.3%	16.0%
Black F 65-79 yr	49.3%	6.3%
Black M 65-79yr	52.4%	11.6%
Latina F 65-79yr	35.8%	3.0%
Latino M 65-79yr	50.2%	10.8%
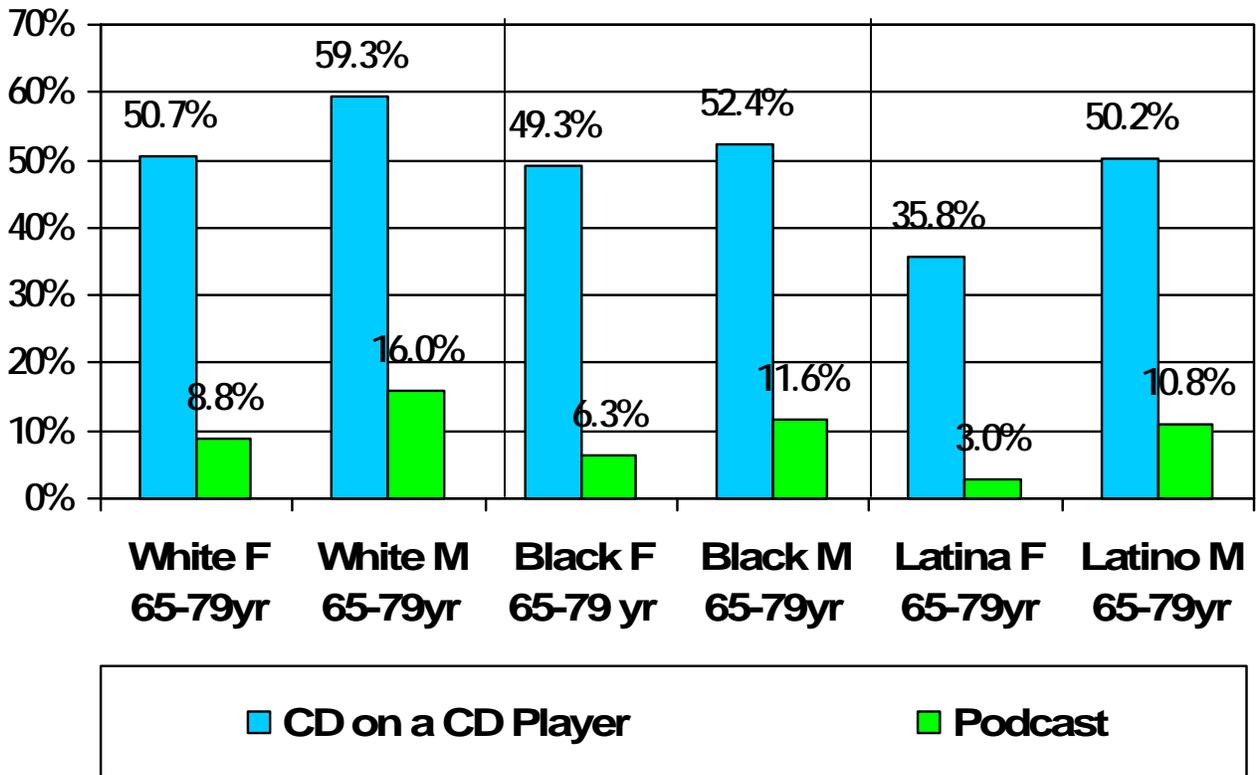
Can Listen to a Podcast, by Age

Line chart legend: White F, Black F, Latina F, White M, Black M, Latino M — by age groups 65-69 yr, 70-74 yr, 75-79 yr, 80-85 yr
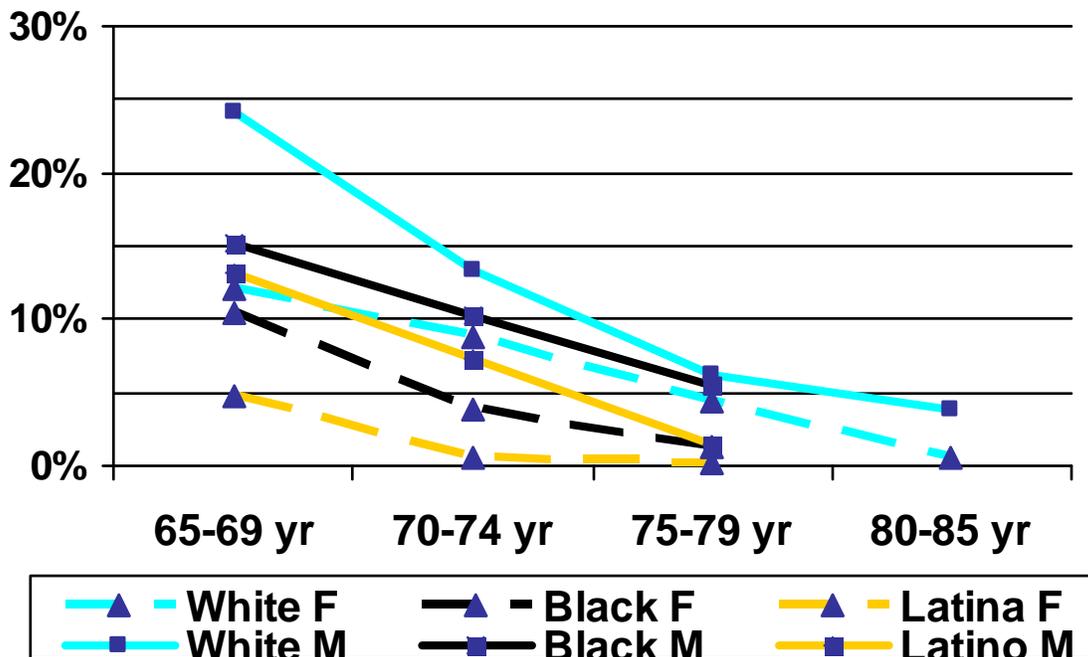
Percentages of Seniors Who Paid for Anything Online in Past 12 mos., Spring 2008
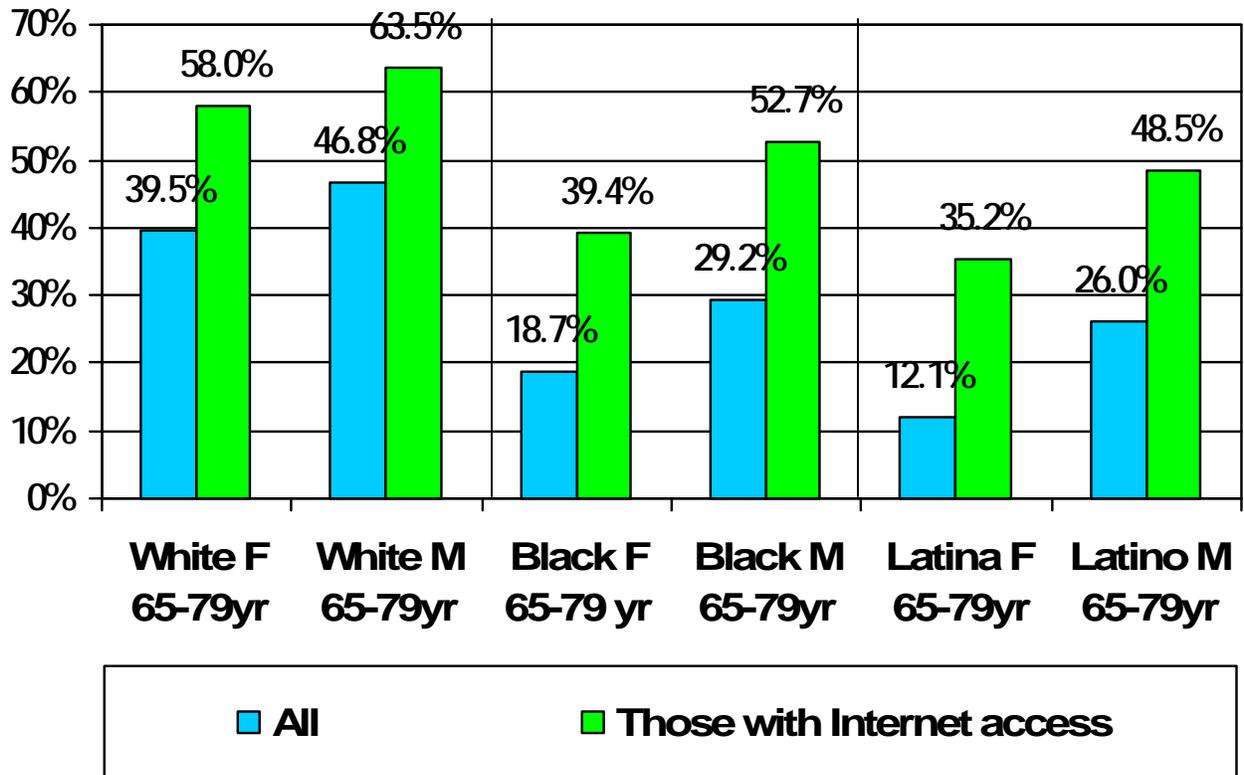
Paid for Anything Online, by Age
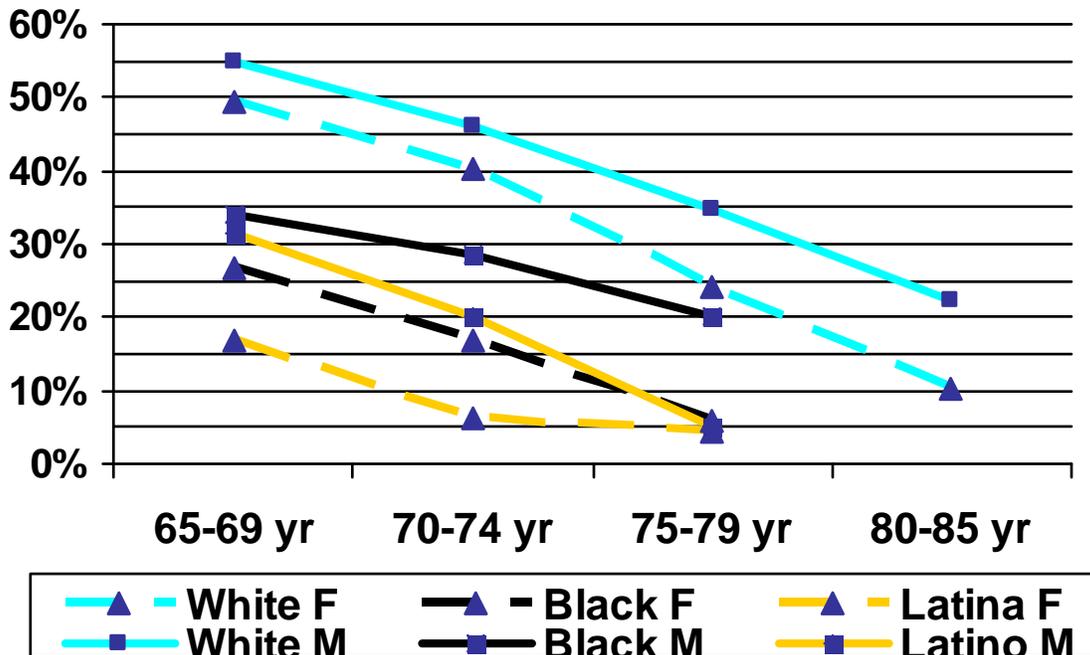
Percentages of Seniors Who Got Product Information from the Web in Past 12 mos., Spring 2008

Legend:
- All (light blue)
- Those with Internet Access (green)

Values shown:
- White F 65-79yr: 51.5% (All), 75.4% (Internet Access)
- White M 65-79yr: 60.5% (All), 82.2% (Internet Access)
- Black F 65-79yr: 28.7% (All), 60.4% (Internet Access)
- Black M 65-79yr: 40.9% (All), 73.8% (Internet Access)
- Latina F 65-79yr: 21.0% (All), 61.0% (Internet Access)
- Latino M 65-79yr: 39.8% (All), 74.2% (Internet Access)

Got Product Information from the Web, by Age (All)

Legend:
- White F
- White M
- Black F
- Black M
- Latina F
- Latino M

Percentages of Seniors Who Got Health Information from the Web in Past 12 mos., Spring 2008

	White F 65-79yr	White M 65-79yr	Black F 65-79yr	Black M 65-79yr	Latina F 65-79yr	Latino M 65-79yr
All	40.6%	45.7%	25.0%	28.0%	16.9%	30.8%
Those with Internet Access	59.7%	62.1%	52.6%	52.0%	49.2%	57.4%

Got Health Information from the Web, by Age (All)

Legend: White F — Black F — Latina F — White M — Black M — Latino M

Age groups: 65-69 yr, 70-74 yr, 75-79 yr, 80-85 yr

Percentages of Seniors Who Got Health Information or Education from kp.org in Past 12 mos., Spring 2008

Legend: ☐ All ☐ Those with Internet Access

White F 65-79yr: 15.2%, 22.4%
White M 65-79yr: 21.2%, 28.7%
Black F 65-79yr: 9.0%, 19.8%
Black M 65-79yr: 15.2%, 27.7%
Latina F 65-79yr: 4.7%, 22.1%
Latino M 65-79yr: 7.3%, 23.0%
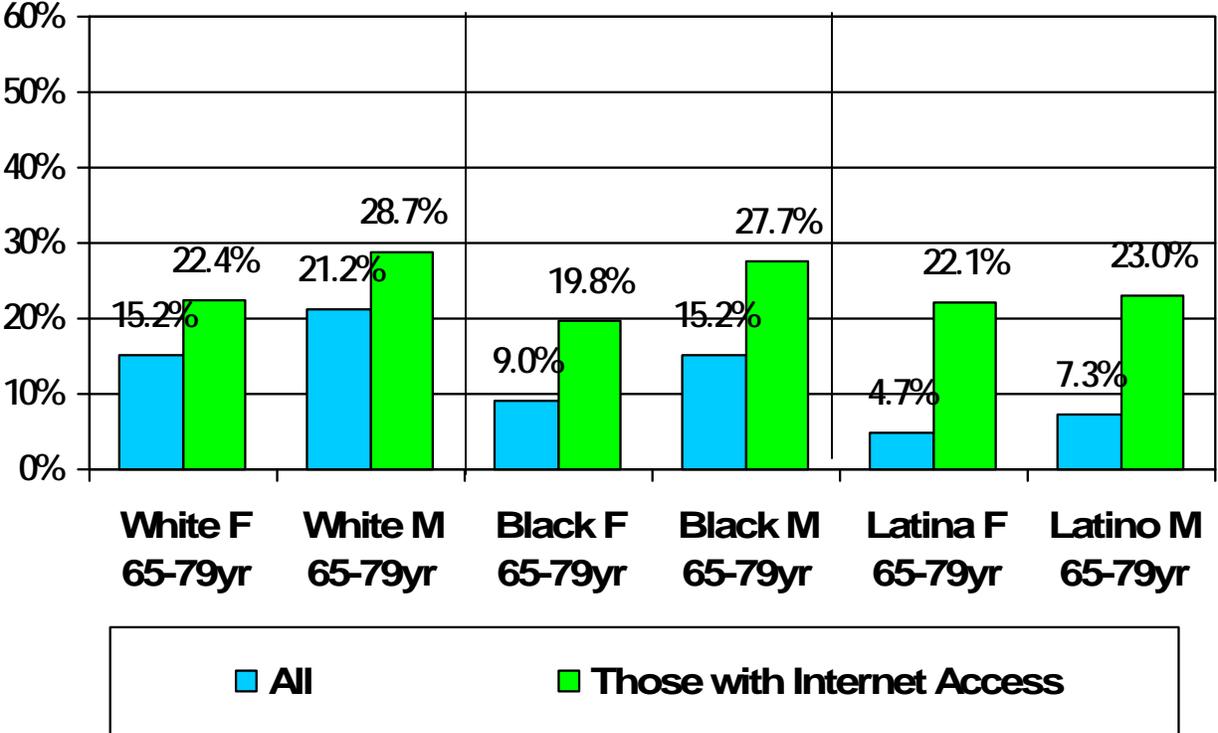
Got Health Info/Educ. from kp.org, by Age (All)

Legend:
White F — Black F — Latina F
White M — Black M — Latino M
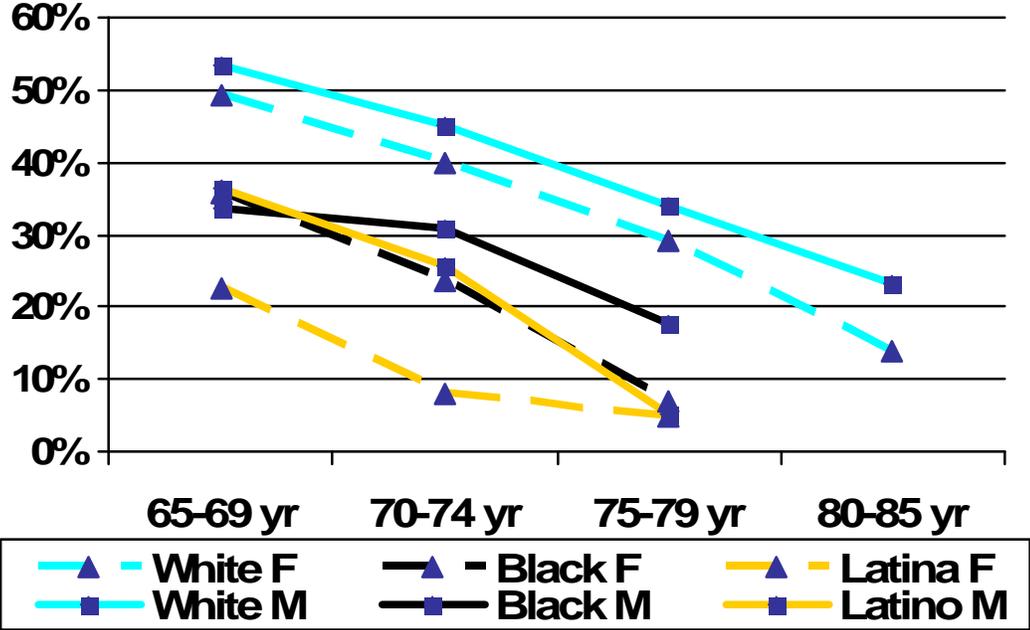
Percentages of Seniors Registered to Use kp.org Secure Features, Spring 2008

Legend: ☐ All   ☐ People with Internet Access

Data (All / People with Internet Access):
- White F 65-79yr: 53.0% / 72.6%
- White M 65-79yr: 60.6% / 78.0%
- Black F 65-79yr: 26.6% / 50.3%
- Black M 65-79yr: 34.0% / 56.9%
- Latina F 65-79yr: 26.9% / 57.7%
- Latino M 65-79yr: 36.5% / 63.1%
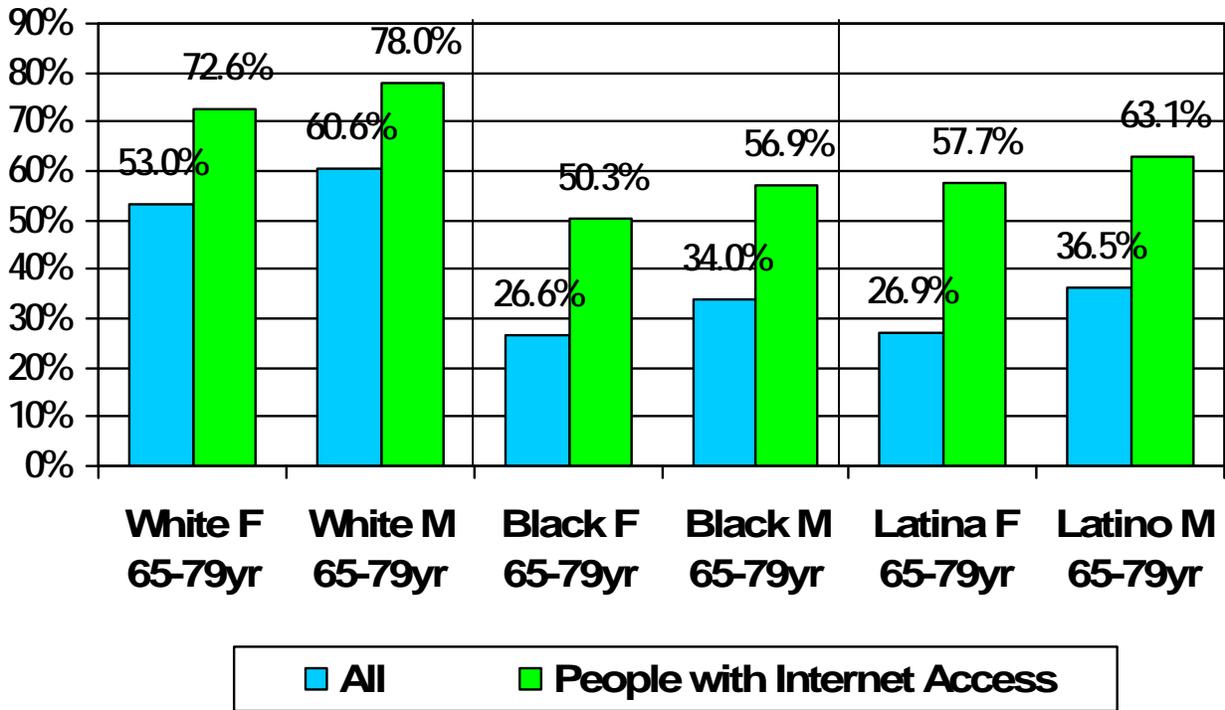
Registered to Use kp.org Secure Features by Age (All)
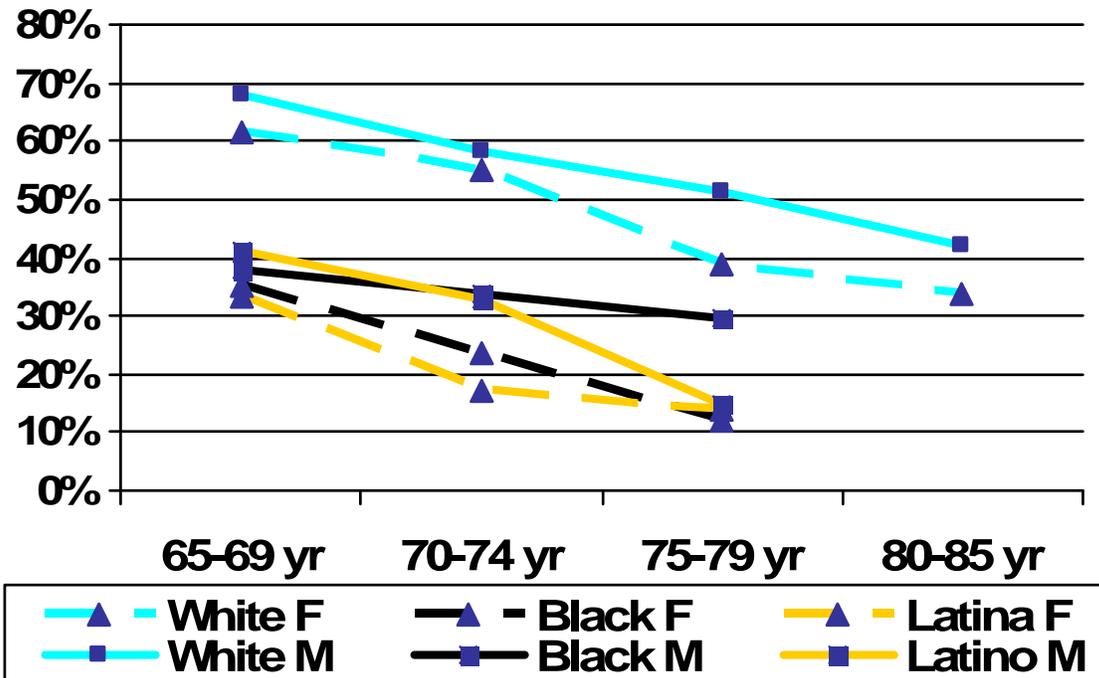
Legend:
- ▲ White F
- ▲ Black F
- ▲ Latina F
- ■ White M
- ■ Black M
- ■ Latino M

Percentages of Seniors Who Used kp.org Secure Features in Past 12 mos, Spring 2008

Chart data (by group):

Group	Secure Messaging	Online Rx Refill	Online Lab Results
White F 65-79yr	27.0%	15.3%	28.4%
White M 65-79yr	35.5%	24.5%	38.8%
Black F 65-79yr	12.1%	6.0%	13.7%
Black M 65-79yr	15.7%	10.8%	19.8%
Latina F 65-79yr	9.0%	5.5%	9.9%
Latino M 65-79yr	17.1%	13.2%	18.9%

Legend: ■ Secure Messaging   ■ Online Rx Refill   ■ Online Lab Results
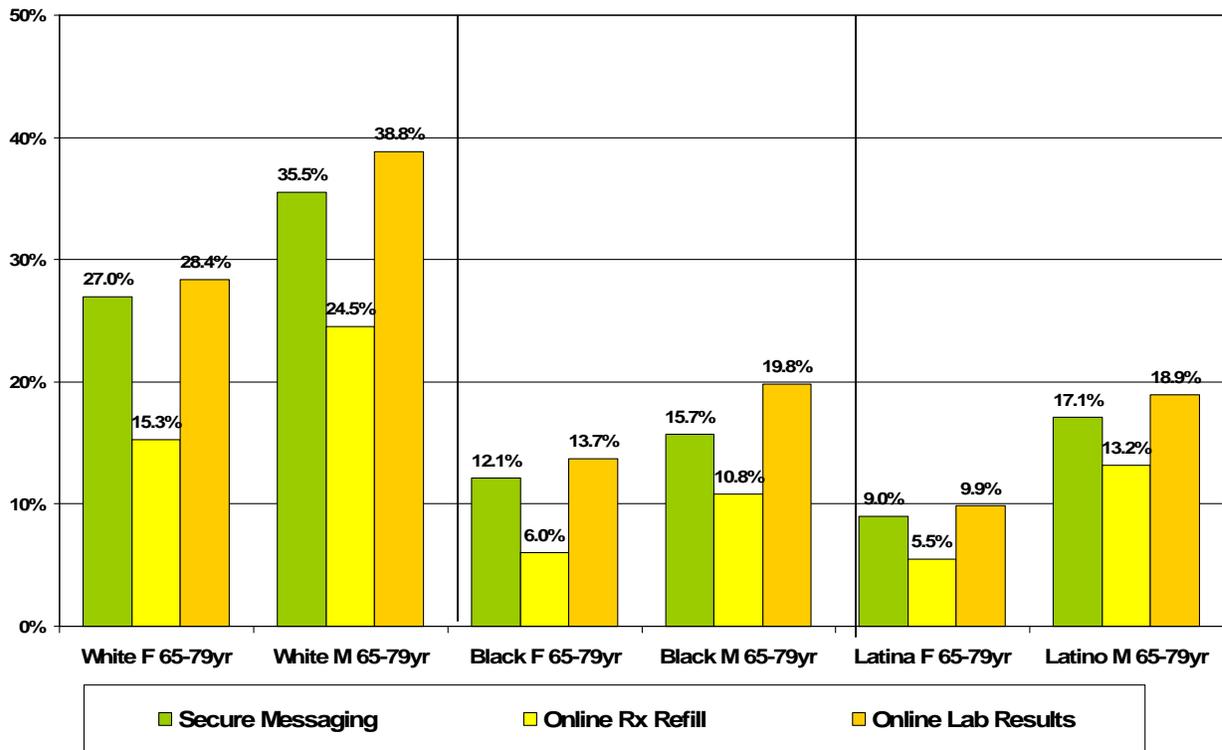
Used kp.org Secure Features in Past 12 mos. (Those with Internet Access)

Chart data (by group):

Group	Secure Messaging	Online Rx Refill	Online Lab Results
White F 65-79yr	39.7%	22.5%	41.7%
White M 65-79yr	48.2%	33.2%	52.6%
Black F 65-79yr	25.6%	12.6%	28.8%
Black M 65-79yr	28.4%	19.4%	35.8%
Latina F 65-79yr	26.2%	16.1%	28.6%
Latino M 65-79yr	31.8%	24.7%	35.2%

Legend: ■ Secure Messaging   ■ Online Rx Refill   ■ Online Lab Results
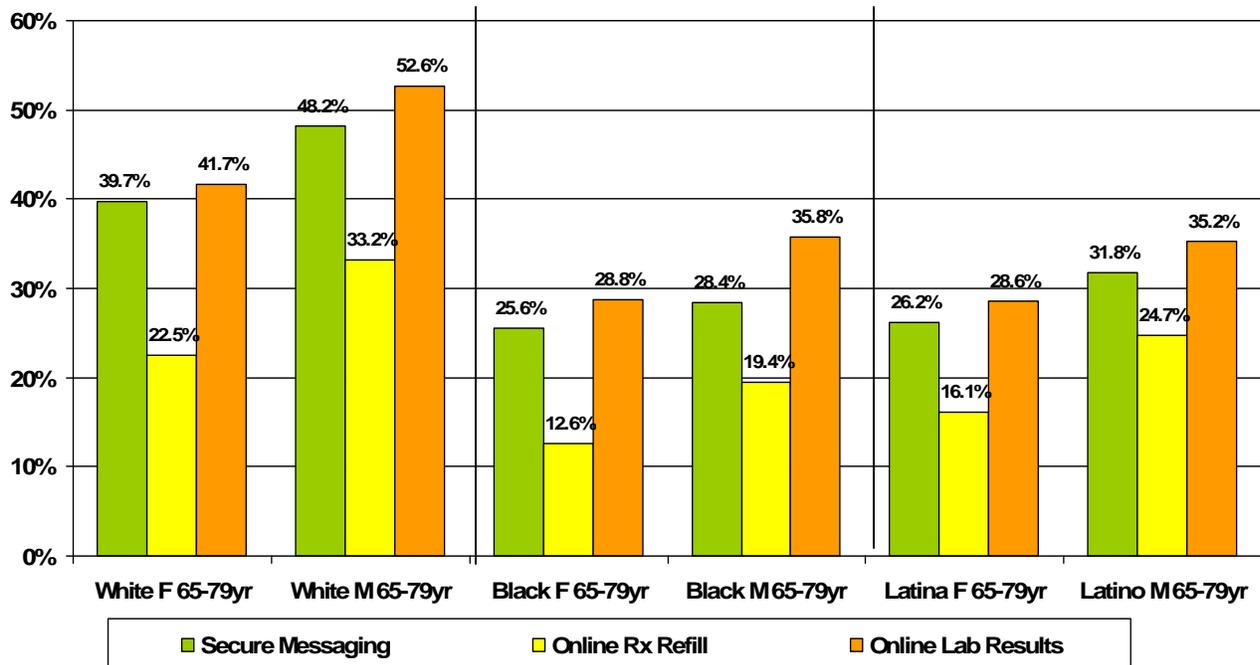
Percentages of Seniors Who Used kp.org Secure Messaging in Past 12 mo., by Age (All), Spring 2008
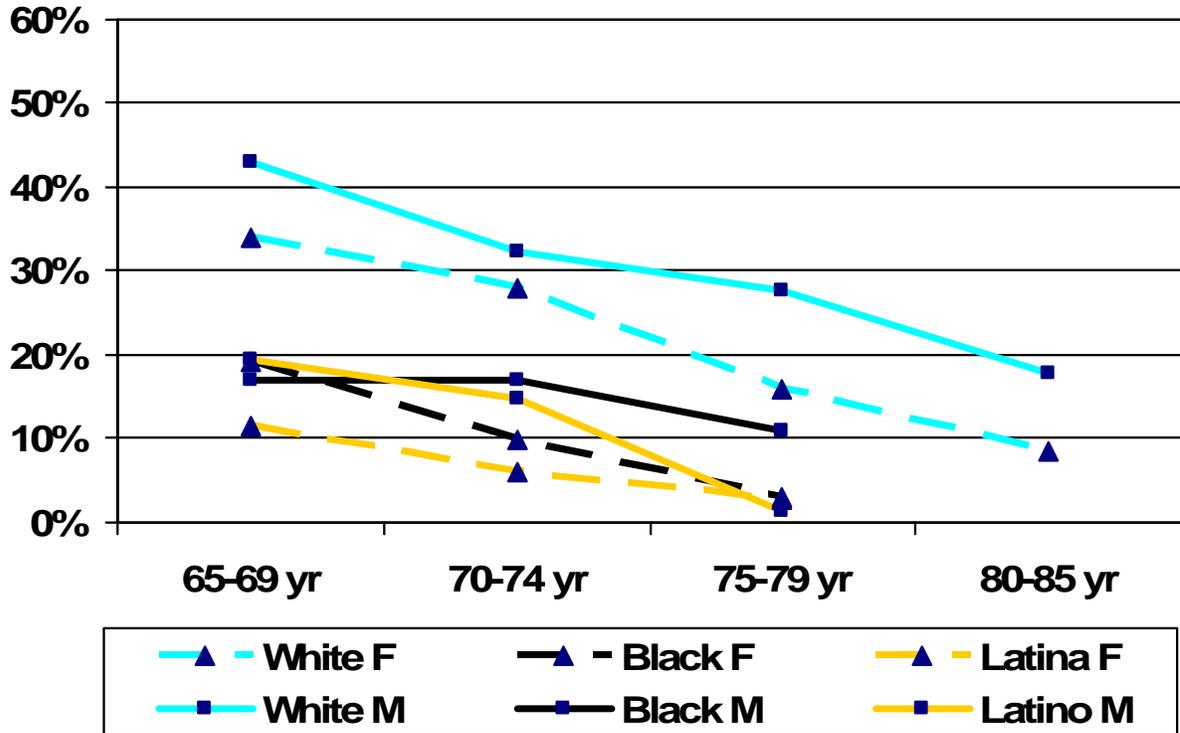
Who Used kp.org Prescription Refill Service, by Age (All)
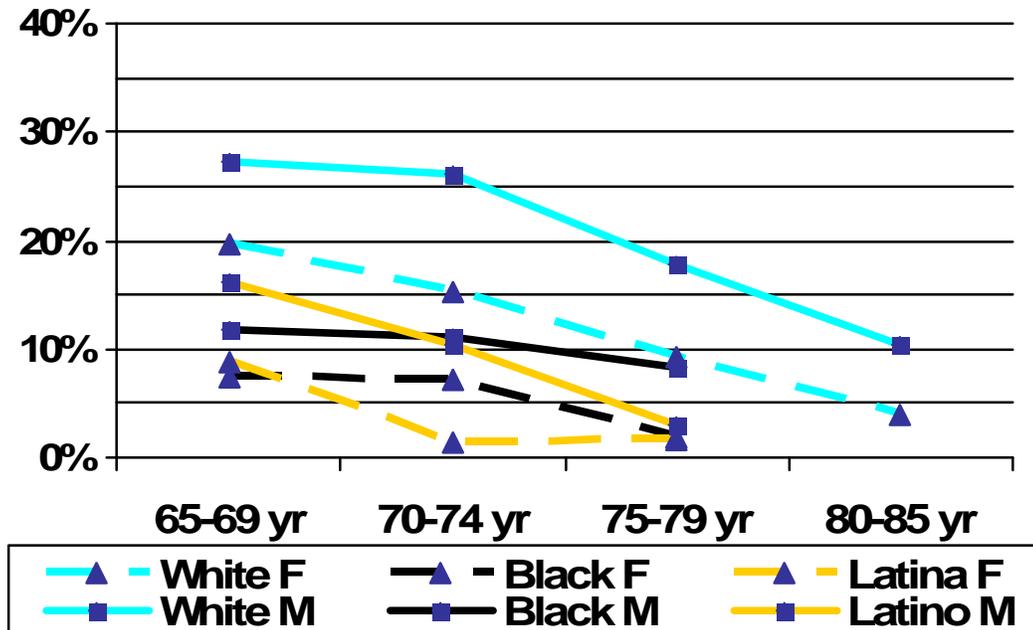
Preferred Method for Communicating with Doctors Outside of Office Visits, Spring 2008

Stacked bar chart with legend: ■ Email Only ■ Email or Phone ■ Phone Only

Group	Email Only	Email or Phone	Phone Only
White F 65-79yr	21.4%	20.6%	58.0%
White M 65-79yr	31.7%	21.0%	47.3%
Black F 65-79yr	8.0%	14.2%	77.8%
Black M 65-79yr	14.5%	15.9%	69.6%
Latina F 65-79yr	7.6%	9.4%	83.0%
Latino M 65-79yr	20.0%	15.0%	0.65
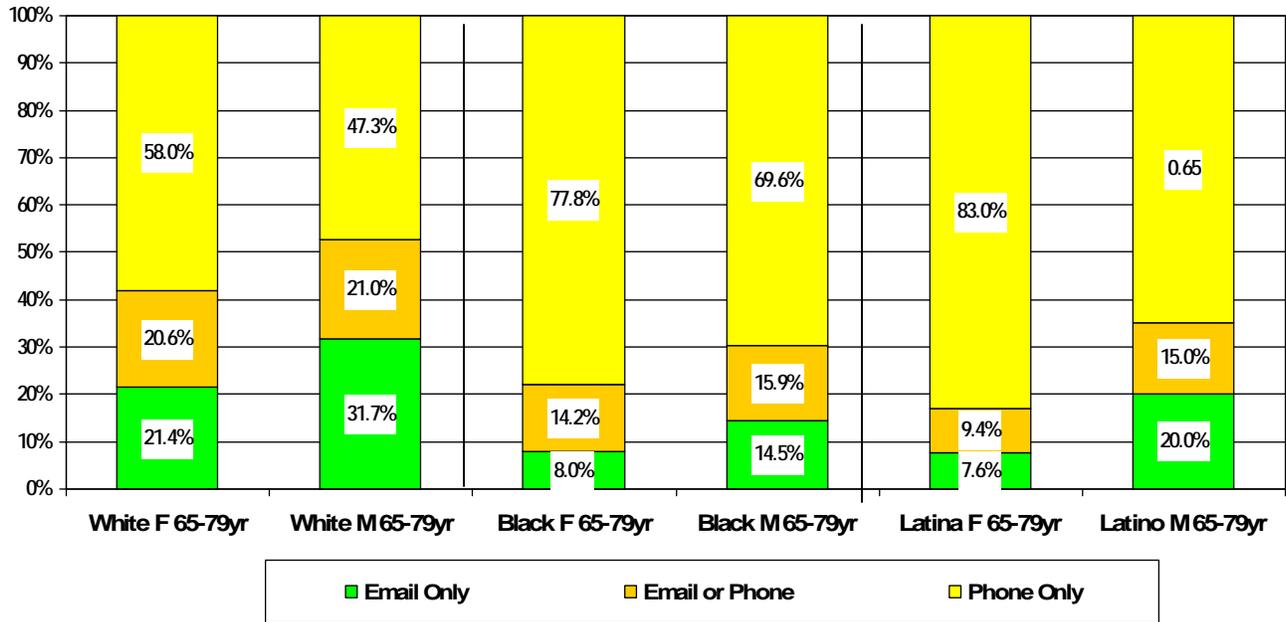
Willingness to Communicate by Email: All and Those with Internet Access

Bar chart with legend: ■ All ■ Those with Internet

Group	All	Those with Internet
White F 65-79yr	42.0%	61.1%
White M 65-79yr	52.7%	69.3%
Black F 65-79yr	22.2%	45.5%
Black M 65-79	20.3%	53.6%
Latina F 65-79yr	17.0%	47.9%
Latino M 65-79yr	35.0%	63.9%
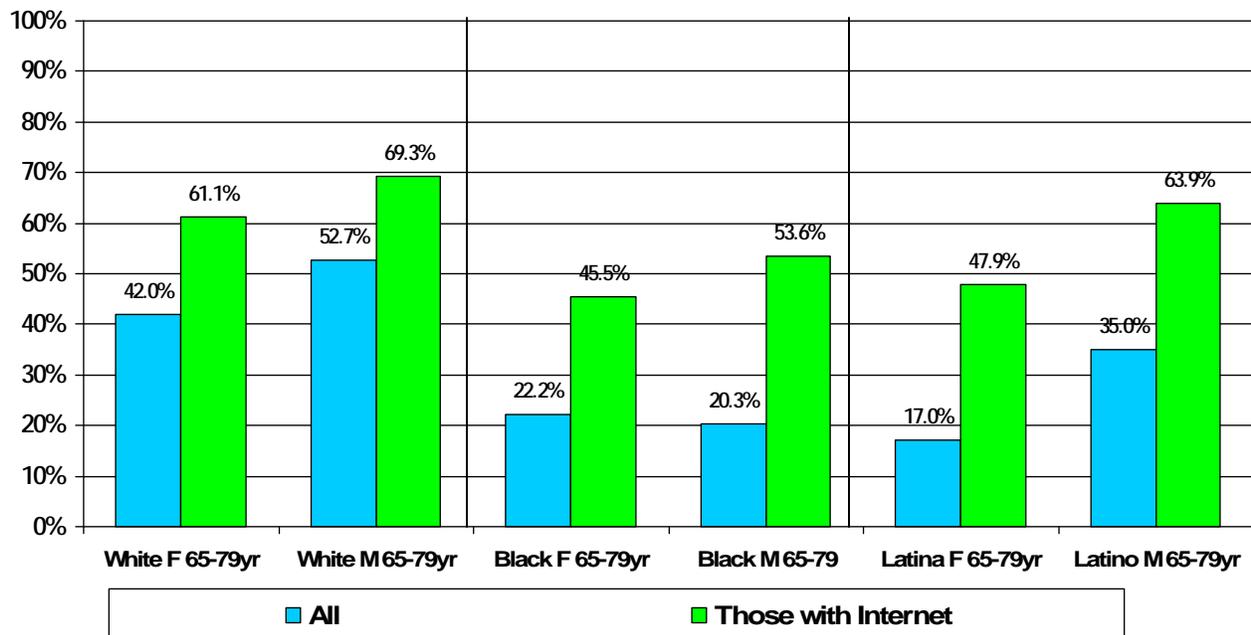
Preferred Method for Refilling Prescriptions at KP, Spring 2008

Legend: ■ Online ■ By phone ■ In pharmacy only

Group	Online	By phone	In pharmacy only
White F 65-79yr	28.6%	81.1%	4.7%
White M 65-79yr	36.0%	70.2%	9.7%
Black F 65-79yr	14.3%	83.3%	13.0%
Black M 65-69	21.9%	74.8%	17.4%
Latina F 65-79	10.4%	79.3%	16.3%
Latino M 65-79yr	21.7%	72.6%	18.2%
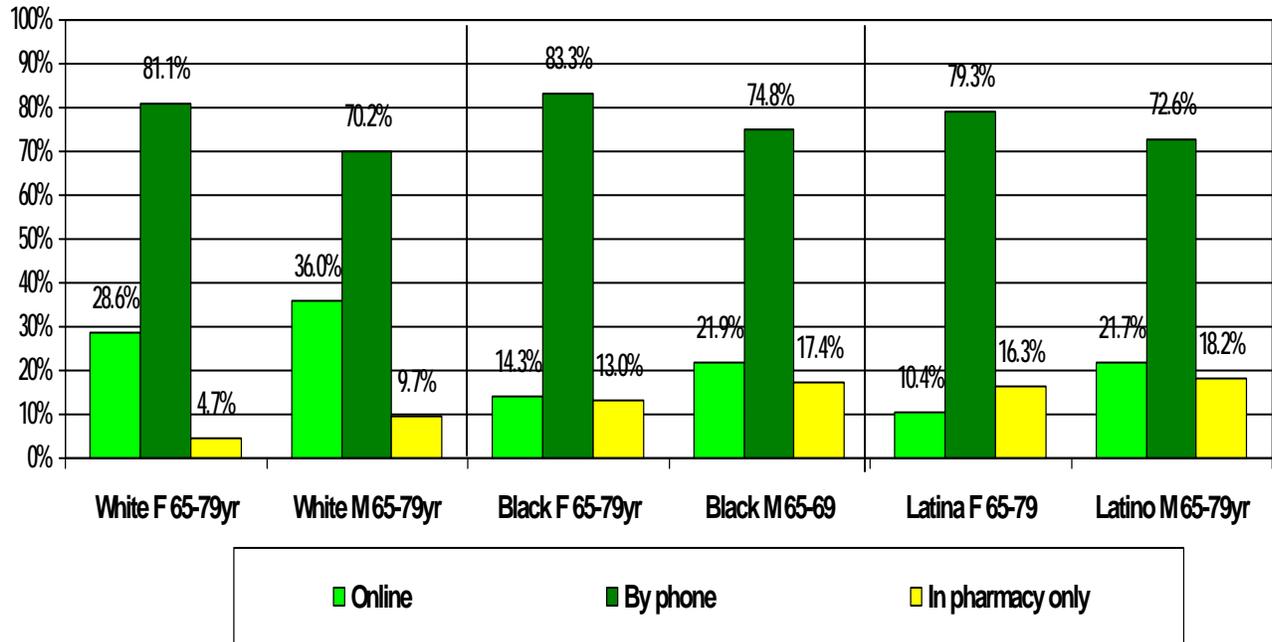
Willingness to Use Online Prescription Refill Service: All and Those with Internet Access

Legend: ■ All ■ Those with Internet Access

Group	All	Those with Internet Access
White F 65-79yr	28.6%	41.6%
White M 65-79yr	36.0%	48.7%
Black F 65-79yr	14.3%	30.0%
Black M 65-79	21.9%	39.0%
Latina F 65-79yr	10.4%	29.9%
Latino M 65-79yr	21.7%	40.1%
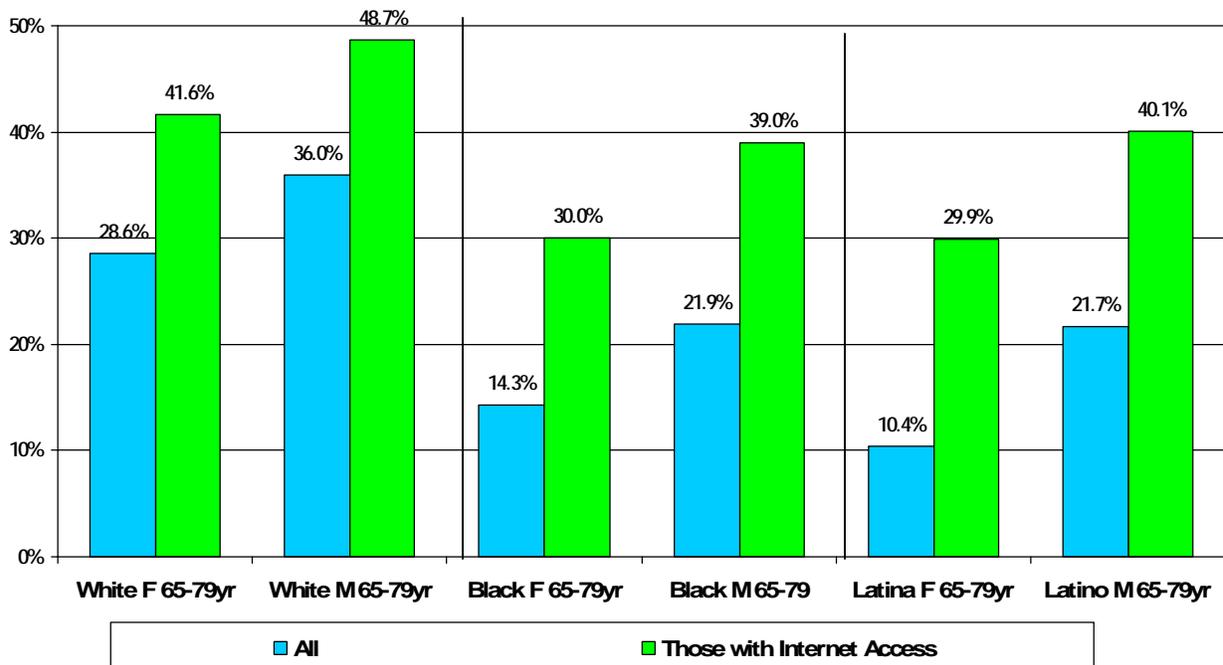
Willingness to Communicate with Doctor via Secure Messaging, by Age (All), Spring 2008

Legend: White F, Black F, Latina F, White M, Black M, Latino M
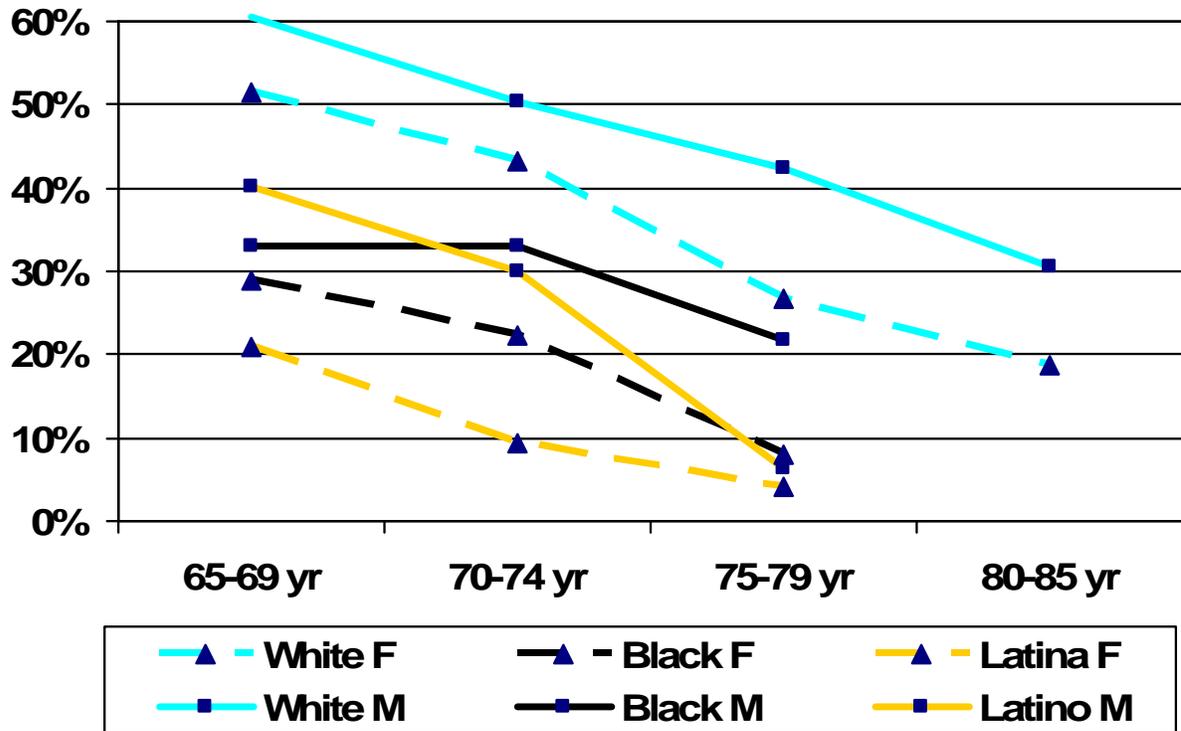
Willingness to Refill Prescriptions Online, by Age (All)

Legend: White F, Black F, Latina F, White M, Black M, Latino M
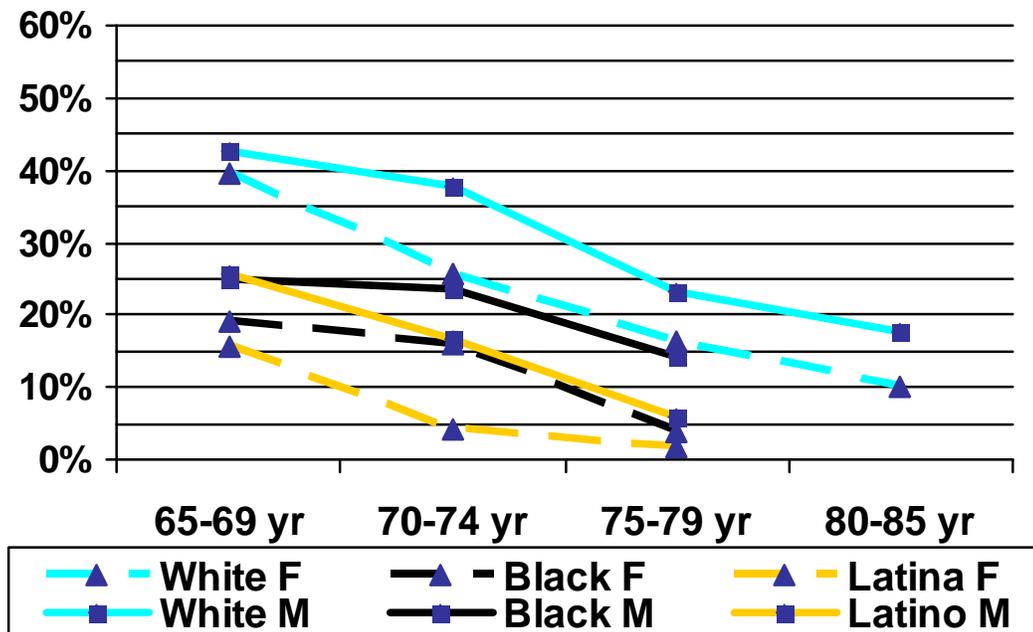
Preferred Method for Getting Health Newsletters, Spring 2008

Group	Email	Regular Mail Only
White F 65-79	29.6%	70.4%
White M 65-79	39.8%	60.2%
Black F 65-79	16.5%	84.2%
Black M 65-69	28.4%	71.7%
Latina F 65-79	13.0%	92.6%
Latino M 65-79	28.2%	84.1%
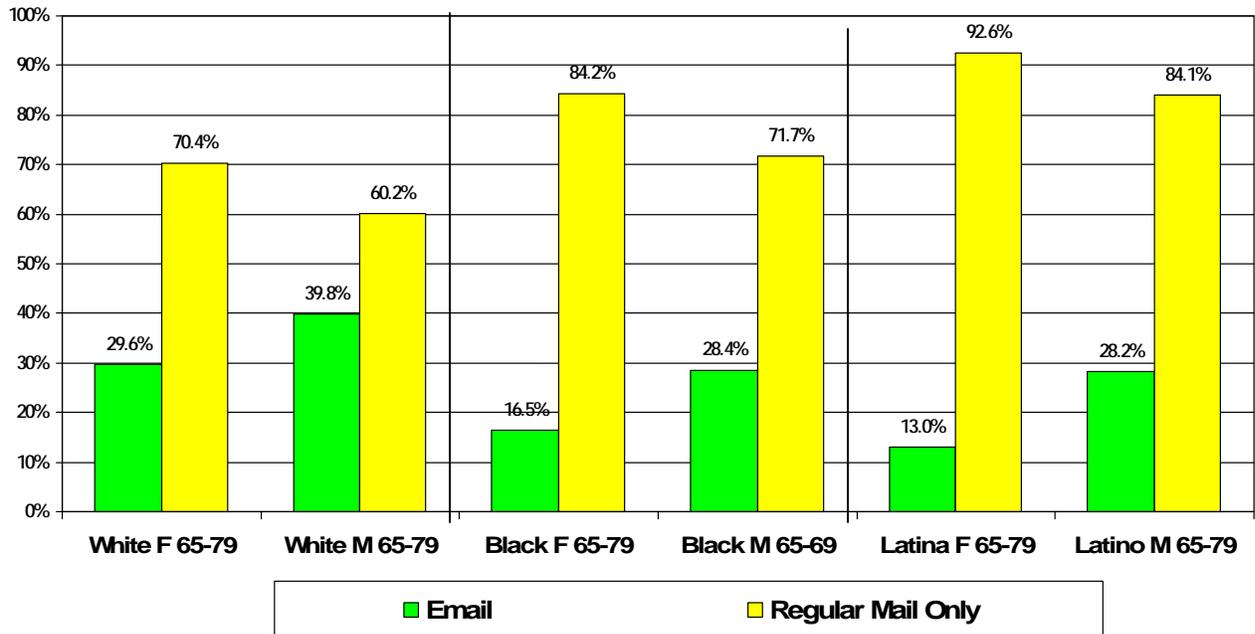
Willingness to Get Health Newsletters by Email: All and Those with Internet Access

Group	All	Those with Internet Access
White F 65-79	29.6%	43.8%
White M 65-79	39.8%	54.5%
Black F 65-79	16.5%	36.5%
Black M 65-79	28.4%	51.8%
Latina F 65-79	13.0%	37.2%
Latino M 65-79	28.2%	52.1%
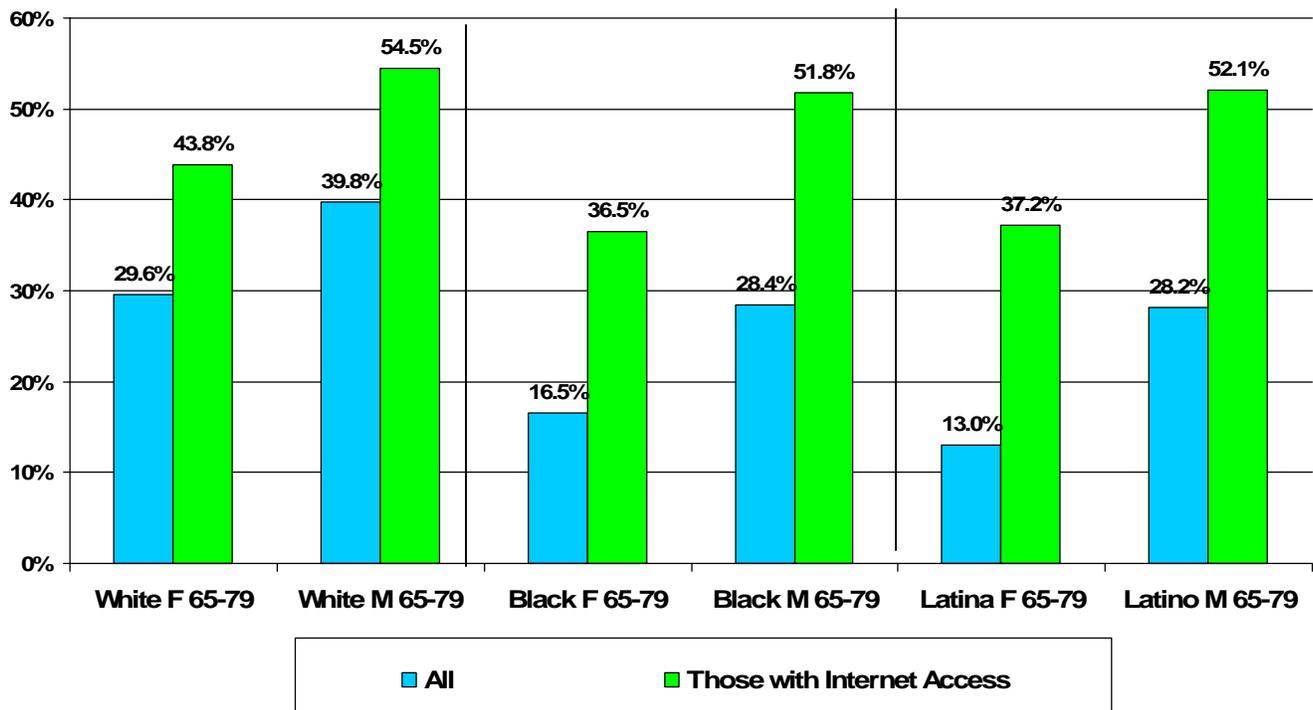
Preferred Methods for Getting Health Information: From a Website, Interactive Programs on a Website, or a DVD at Home, Spring 2008

Chart data — Preferred Methods:

Group	Website	Web-based program	DVD at home
White F 65-79	36.5%	11.1%	49.2%
White M 65-79	40.6%	19.7%	55.3%
Black F 65-79	20.4%	7.8%	62.2%
Black M 65-79	26.1%	13.4%	67.0%
Latina F 65-79	14.4%	4.4%	55.3%
Latino M 65-79	29.3%	10.3%	59.8%

Legend: ■ Website   ■ Web-based program   ■ DVD at home
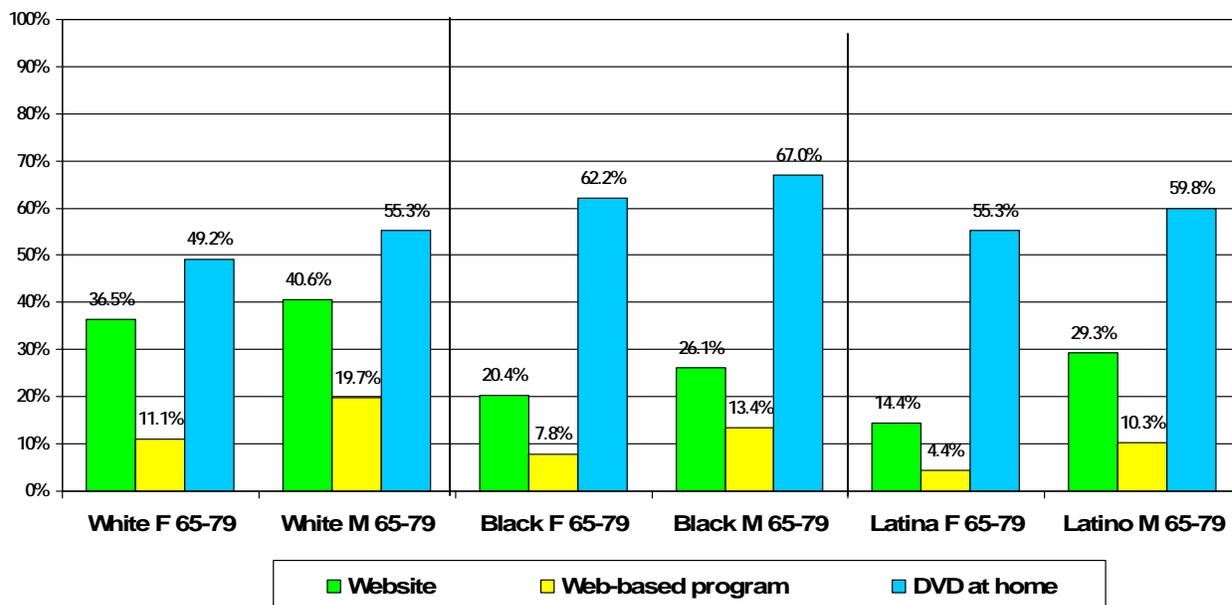
Willingness to Use the Web for Health Information and Health Education Programs: Those with Internet Access

Chart data — Willingness to Use the Web:

Group	Information	Interactive Education Programs
White F 65-79	53.6%	16.3%
White M 65-79	55.1%	26.7%
Black F 65-79	43.0%	16.6%
Black M 65-79	47.1%	24.1%
Latina F 65-79	41.8%	12.8%
Latino M 65-79	54.6%	19.3%

Legend: ■ Information   ■ Interactive Education Programs