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### **Health Online 2013**

35% of U.S. adults have gone online to figure out a medical condition; of these, half followed up with a visit to a medical professional

**Susannah Fox** Associate Director, Pew Internet Project

Maeve Duggan Research Assistant, Pew Internet Project

Pew Research Center's Internet & American Life Project 1615 L St., NW – Suite 700 Washington, D.C. 20036 Phone: 202-419-4500

### **Summary of Findings**

## One in three American adults have gone online to figure out a medical condition

Thirty-five percent of U.S. adults say that at one time or another they have gone online specifically to try to figure out what medical condition they or someone else might have.

These findings come from a national survey by the Pew Research Center's Internet & American Life Project. Throughout this report, we call those who searched for answers on the internet "online diagnosers."

When asked if the information found online led them to think they needed the attention of a medical professional, 46% of online diagnosers say that was the case. Thirty-eight percent of online diagnosers say it was something they could take care of at home and 11% say it was both or in-between.

When we asked respondents about the accuracy of their initial diagnosis, they reported:

- 41% of online diagnosers say a medical professional confirmed their diagnosis. An additional 2% say a medical professional partially confirmed it.
- 35% say they did not visit a clinician to get a professional opinion.
- 18% say they consulted a medical professional and the clinician either did not agree or offered a different opinion about the condition.
- 1% say their conversation with a clinician was inconclusive.

Women are more likely than men to go online to figure out a possible diagnosis. Other groups that have a high likelihood of doing so include younger people, white adults, those who live in households earning \$75,000 or more, and those with a college degree or advanced degrees.

It is important to note what these findings mean – and what they don't mean. Historically, people have always tried to answer their health questions at home and made personal choices about whether and when to consult a clinician. Many have now added the internet to their personal health toolbox, helping themselves and their loved ones better understand what might be ailing them. This study was not designed to determine whether the internet has had a good or bad influence on health care. It measures the scope, but not the outcome, of this activity.

## Clinicians are a central resource for information or support during serious health episodes — and the care and conversation take place mostly offline

To try to capture a focused picture of people's health information search and information-assessment strategies, we asked respondents to think about the last time they had a serious health issue and to whom they turned for help, either online or offline:

- 70% of U.S. adults got information, care, or support from a doctor or other health care professional.
- 60% of adults got information or support from friends and family.
- 24% of adults got information or support from others who have the same health condition.

The vast majority of this care and conversation took place offline, but a small group of people did communicate with each of these sources online. And, since a majority of adults consult the internet when they have health questions, these communications with clinicians, family, and fellow patients joined the stream of information flowing in.

#### Eight in 10 online health inquiries start at a search engine

Looking more broadly at the online landscape, 72% of internet users say they looked online for health information of one kind or another within the past year. This includes searches related to serious conditions, general information searches, and searches for minor health problems. For brevity's sake, we will refer to this group as "online health seekers."

When asked to think about the last time they hunted for health or medical information, 77% of online health seekers say they began at a search engine such as Google, Bing, or Yahoo. Another 13% say they began at a site that specializes in health information, like WebMD. Just 2% say they started their research at a more general site like Wikipedia and an additional 1% say they started at a social network site like Facebook.

#### Half of health information searches are on behalf of someone else

When asked to think about the last time they went online for health or medical information, 39% of online health seekers say they looked for information related to their own situation. Another 39% say they looked for information related to someone else's health or medical situation. An additional 15% of these internet users say they were looking both on their own and someone else's behalf.

#### One in four people seeking health information online have hit a pay wall

Twenty-six percent of internet users who look online for health information say they have been asked to pay for access to something they wanted to see online. Of those who have been asked to pay, just 2% say they did so. Fully 83% of those who hit a pay wall say they tried to find the same information somewhere else. Thirteen percent of those who hit a pay wall say they just gave up.

## The social life of health information is a low-key but steady presence in American life

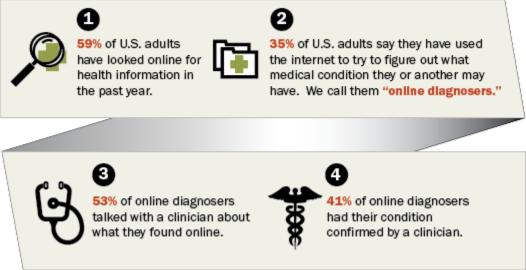
In past surveys, the Pew Internet Project has not defined a time period for health activities online. This time, the phrase "in the past 12 months" was added to help focus respondents on recent episodes. We

find once again that there is a social life of health information, as well as peer-to-peer support, as people exchange stories about their own health issues to help each other understand what might lie ahead:

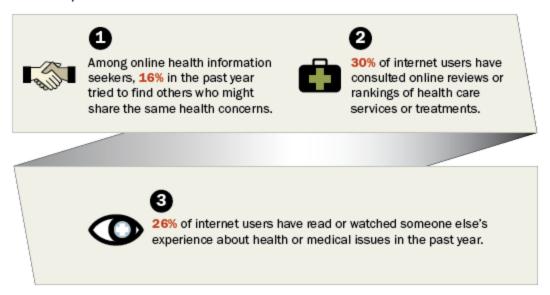
- 26% say they read or watched someone else's experience about health or medical issues in the last 12 months.
- 16% of internet users say they went online in the last year to find others who might share the same health concerns.

Health-related reviews and rankings continue to be used by only a modest group of consumers. About one in five internet users have consulted online reviews of particular drugs or medical treatments, doctors or other providers, and hospitals or medical facilities. And just 3-4% of internet users have posted online reviews of health care services or providers.

## The internet as diagnostic tool...



#### Peer-to-peer healthcare



#### **About this study**

The results reported here come from a nationwide survey of 3,014 adults living in the United States. Telephone interviews were conducted by landline (1,808) and cell phone (1,206, including 624 without a landline phone). The survey was conducted by Princeton Survey Research Associates International. Interviews were done in English and Spanish by Princeton Data Source from August 7 to September 6, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is  $\pm 2.4$  percentage points.

The Pew Internet & American Life Project is an initiative of the Pew Research Center, a nonprofit "fact tank" that provides information on the issues, attitudes and trends shaping America and the world. The Project is nonpartisan and takes no position on policy issues. Support for the Project is provided by the Pew Charitable Trusts.

Support for this study was provided by the California HealthCare Foundation, an independent philanthropy committed to improving the way health care is delivered and financed in California.

### Part One: Information triage

#### For one-third of U.S. adults, the internet is a diagnostic tool

As of September 2012, 81% of U.S. adults use the internet and, of those, 72% say they have looked online for health information in the past year.

Since online personal diagnosis is a scenario that has intrigued observers for years – and caused some anxiety about people's ability to navigate the online information landscape – the Pew Research Center's Internet & American Life Project explored it in some depth in its most recent health survey. Of those who have looked online for health information, 59% say they have ever gone online specifically to try to figure out what medical condition they or someone else might have. That translates to 35% of U.S. adults.

Women are more likely than men to go online to figure out a possible diagnosis. Other groups that have a high likelihood of doing so include younger people, white adults, those in the highest income bracket, and those with more education (see the table below for details).

The following analysis is based on questions asked only of that 35% of the population who answered that they have gone online to figure out what they or someone else might have. We will refer to them as "online diagnosers."

First, online diagnosers were asked if the information they found online led them to think that this was a condition that needed the attention of a doctor or other medical professional, or that it was perhaps something they could take care of at home:

- 46% of online diagnosers say that the condition needed the attention of a doctor;
- 38% say it could be taken care of at home; and
- 11% said it was either both or in-between.

Fifty-three percent of online diagnosers say they talked with a medical professional about what they found online, 46% did not (see table below for details).

Separately, we asked if a medical professional confirmed what they thought the condition was and found that:

- 41% of online diagnosers say yes, a medical professional confirmed their suspicions. An additional 2% say a medical professional partially confirmed them.
- 35% say they did not visit a clinician to get a professional opinion.
- 18% say a medical professional either did not agree or offered a different opinion about the condition.
- 1% say their conversation with a clinician was inconclusive the professional was unable to diagnose what they had.

### Online diagnosis and professional follow-up

% of adults who looked online to diagnose a condition and the % of those online diagnosers who followed up with a medical professional about what they found

		Looked online to diagnose a condition (N for all adults=3,014)	Followed up with medical professional after online diagnosis (N for online diagnosers=1,003)
	All	35%	53%
а	Men	30	50
b	Women	<b>40</b> <sup>a</sup>	55
	Age		
а	18-29	47 <sup>cd</sup>	47
b	30-49	43 <sup>cd</sup>	55
С	50-64	<b>29</b> <sup>d</sup>	58
d	65+	13	47
	Race/ethnicity		
а	White, Non-Hispanic	37 <sup>bc</sup>	52
b	Black, Non-Hispanic	30	59
С	Hispanic	25	58
	Annual household income		
а	Less than \$30,000/yr	25	44
b	\$30,000-\$49,999	37 <sup>a</sup>	60 <sup>a</sup>
С	\$50,000-\$74,999	<b>44</b> <sup>a</sup>	62 <sup>a</sup>
d	\$75,000+	<b>51</b> <sup>ab</sup>	53
	Education level		
а	Less than high school diploma	9	
b	High school grad	<b>26</b> <sup>a</sup>	51
С	Some College	41 <sup>ab</sup>	55
d	College +	49 <sup>abc</sup>	51

**Source:** Pew Internet Health Survey, August 7 – September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 2.4 percentage points for all adults and +/- 3.6 percentage points for online diagnosers.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

There is no statistically significant difference between those who have health insurance and those who do not when it comes to using the internet to figure out an illness.

It is important to note what these findings mean – and what they don't mean. Historically, people have always tried to answer their health questions at home and made personal choices about whether and when to consult a clinician. Many have now added the internet to their personal health toolbox, helping themselves and their loved ones better understand what might be ailing them. This study was not designed to determine whether the internet has had a good or bad influence on health care. It measures the scope, but not the outcome, of this activity.

#### Eight in ten online health inquiries start at a search engine

Again, 72% of internet users say they looked online for health information within the past year. For brevity's sake, we will refer to this group as "online health seekers."

When asked to think about the last time they did so, 77% of online health seekers say they began at a search engine such as Google, Bing, or Yahoo. Another 13% say they began at a site that specializes in health information, like WebMD. Just 2% say they started their research at a more general site like Wikipedia and an additional 1% say they started at a social network site like Facebook.

Using a search engine is somewhat associated with being younger. For example, 82% of online health seekers age 18-29 years old say they used Google, Bing, Yahoo, or another search engine, compared with 73% of those ages 50 and older.

Overall, this pattern matches what we found in our very first health survey, conducted in 2000, when just half of U.S. adults had internet access. Then, as now, eight in ten online health seekers started at a general search engine when looking online for health or medical information.

## Clinicians are a central resource for information or support during serious health episodes – and the care and conversation take place mostly offline

To try to capture an accurate picture of people's health information seeking strategies, we asked respondents to think about the last time they had a serious health issue and to whom they turned for help:

- 70% of U.S. adults got information, care, or support from a doctor or other health care professional.
- 60% of adults got information or support from friends and family.
- 24% of adults got information or support from others who have the same health condition.

The vast majority of this care and conversation took place offline (see table below).

The last time you had a health issue, did you get information, care, or support from	Total yes	Yes, online	Yes, offline	Yes, both	Not a source
A doctor or other health care professional	70%	1%	61%	8%	28%
Friends and family	60	1	39	20	39
Others who have the same health condition	24	2	15	7	73

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults. Margin of error for internet users (N=2,392) is +/- 2.6 percentage points.

Certain groups are significantly more likely to report calling upon a clinician for health advice: women, adults ages 50 and older, non-Hispanic whites, and adults with at least some college education. Fully three-quarters of people who have health insurance consulted a doctor or other health care professional, compared with half (49%) of the uninsured.

Women are more inclined than men to seek information, care, or support from friends and family: 68% vs. 53%. Non-Hispanic whites, adults with health insurance, and those with some college education are also more likely than other groups to turn to friends and family. Almost two-thirds (63%) of those with insurance approached friends and family, while half (48%) of the uninsured did so.

Differences among demographic groups are less apparent when looking at peer health support, but two groups stand out: women and people with health insurance. Twenty-eight percent of women have sought advice from others who have the same health condition, compared with 21% of men. One-quarter (26%) of the insured sought out others with the same health condition, compared to 19% of those without insurance.

These findings reflect differences we first observed in 2010, with little change over the past two years.

#### Half of online health inquiries are on behalf of someone else

When asked to think about the last time they went online for health or medical information, 39% of internet users who have done this type of research say they looked for information related to their own situation. Another 39% say they looked for information related to someone else's health or medical situation. And 15% of these internet users say they were looking both on their own and someone else's behalf.

Online health seekers age 65 and older are more likely than those in the middle age groups to say their last search was on their own behalf: 48%, compared with 39% of 50-64 year-olds, for example. Parents are more likely than non-parents to look on behalf of someone else: 44%, compared with 36%.

This trend has not changed significantly since we first began tracking it in 2000: more than half of health searches are conducted on behalf of someone not touching the keyboard.

## Specific diseases and treatments continue to dominate people's online queries

In past surveys, the Pew Internet Project has not defined a time period for health searches online. This time, the phrase "in the past 12 months" was added to help focus respondents on recent searches.

As one would expect, the percentages dipped for each of the topics we include in the list. For example, 55% of internet users say they looked online for information about a specific disease or medical problem *in the past year*, compared with 66% of internet users who, in 2010, said they had *ever* done such a search.

	The % of adult internet users who have looked online in the last 12					
montr	months for information about					
55%	Specific disease or medical problem					
43	Certain medical treatment or procedure					
27	How to lose weight or how to control your weight					
25	Health insurance, including private insurance, Medicare or Medicaid					
19	Food safety or recalls					
16	Drug safety or recalls					
16	A drug you saw advertised					
15	Medical test results					
14	Caring for an aging relative or friend					
12	Pregnancy and childbirth					
11	How to reduce your health care costs					
20	Any other health issue					
72	at least one of the above topics					

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults. Margin of error for internet users (N=2,392) is +/- 2.6 percentage points.

Women are more likely than men to seek health information online, as are internet users with higher levels of education:

			Sex	Education leve		ion level	
Health topic	All internet users	Men	Women	Some high school	High school grad	Some college	College grad
	N=2,392	N=1,084	N=1,308	N=107	N=574	N=656	N=1,046
		(a)	(b)	(a)	(b)	(c)	(d)
Specific disease or medical problem	55	48	62 <sup>a</sup>	34	43	58 <sup>ab</sup>	67 <sup>abc</sup>
Certain medical treatment or procedure	43	37	49 <sup>a</sup>	22	36 <sup>a</sup>	45 <sup>ab</sup>	52 <sup>abc</sup>
How to lose weight or how to control your weight	27	19	34 <sup>a</sup>	23	20	29 <sup>b</sup>	<b>32</b> <sup>b</sup>
Health insurance, including private insurance, Medicare or Medicaid	25	25	25	17	17	26 <sup>b</sup>	32 <sup>ab</sup>
Food safety or recalls	19	19	19	16	16	19	23 <sup>b</sup>
Drug safety or recalls	16	14	18 <sup>a</sup>	10	13	17	<b>20</b> <sup>ab</sup>
A drug you saw advertised	16	15	16	9	13	18 <sup>a</sup>	17 <sup>a</sup>
Medical test results	15	13	16	3	8	15 <sup>ab</sup>	23 <sup>abc</sup>
Caring for an aging relative or friend	14	15	13	8	12	15	16 <sup>ab</sup>
Pregnancy and childbirth	12	11	13	17	9	<b>14</b> <sup>b</sup>	12
How to reduce your health care costs	11	11	11	11	8	11	13 <sup>b</sup>
Any other health issue	20	16	<b>25</b> <sup>a</sup>	12	15	<b>22</b> <sup>ab</sup>	25 <sup>ab</sup>
At least one of the above topics	72	65	<b>79</b> <sup>a</sup>	57	63	<b>74</b> <sup>ab</sup>	<b>81</b> <sup>abc</sup>

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users. Margins of error for sub-populations are higher.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

There are only four significant differences among white, African American, and Latino internet users when it comes to health topics: specific diseases, weight control, a drug seen in advertising, and pregnancy. Differences among age groups are a much more mixed bag of topics.

		Rac	e/ethni	city	Age			
Health topic	All internet users	White	Black	Latino	18-29	30-49	50-64	65+
	N=2,392	N=1,531	N=348	N=314	N=454	N=759	N=668	N=463
		(a)	(b)	(c)	(a)	(b)	(c)	(d)
Specific disease or medical problem	55	58 <sup>bc</sup>	47	48	53 <sup>d</sup>	59 <sup>d</sup>	59 <sup>d</sup>	43
Certain medical treatment or procedure	43	45	42	39	39	48 <sup>ad</sup>	<b>44</b> <sup>d</sup>	36
How to lose weight or how to control your weight	27	23	34 <sup>a</sup>	35 <sup>a</sup>	32 <sup>cd</sup>	32 <sup>cd</sup>	<b>21</b> <sup>d</sup>	11
Health insurance, including private insurance, Medicare or Medicaid	25	24	23	26	26	<b>28</b> <sup>d</sup>	23	19
Food safety or recalls	19	18	18	20	18	24 <sup>acd</sup>	17	12
Drug safety or recalls	16	16	20	16	<b>14</b> <sup>d</sup>	<b>20</b> <sup>d</sup>	<b>17</b> <sup>d</sup>	8
A drug you saw advertised	16	15	<b>22</b> <sup>a</sup>	15	16	15	<b>18</b> <sup>d</sup>	11
Medical test results	15	16	12	15	13	15	19 <sup>ad</sup>	10
Caring for an aging relative or friend	14	14	15	15	13	16 <sup>d</sup>	<b>15</b> <sup>d</sup>	8
Pregnancy and childbirth	12	10	11	17 <sup>a</sup>	25 <sup>bcd</sup>	13 <sup>cd</sup>	2	-
How to reduce your health care costs	11	10	13	12	<b>10</b> <sup>d</sup>	13 <sup>d</sup>	<b>11</b> <sup>d</sup>	5
Any other health issue	20	21	16	17	17	<b>24</b> <sup>ad</sup>	<b>22</b> <sup>d</sup>	14
At least one of the above topics	72	73	69	66	<b>76</b> <sup>d</sup>	<b>75</b> <sup>d</sup>	<b>71</b> <sup>d</sup>	58

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users. Margins of error for sub-populations are higher.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

Internet users with health insurance are significantly more likely than those without health insurance to research certain topics, such as a specific disease or treatment. Other topics, such as food and drug

safety, are moderately more popular among internet users with health insurance, compared with those who do not report having insurance coverage.

#### Seeking health information online

% of insured vs. uninsured internet users who have looked for information online about ...

	Insured (n=2,066)	Uninsured (n=326)
Specific disease or medical problem	60%*	35%
Certain medical treatment or procedure	48*	24
How to lose or control weight	27	24
Health insurance	25	25
Food safety or recalls	20*	15
Drug safety or recalls	17*	12
Medical test results	17*	6
Advertised drug	16	12
Caring for an aging loved one	15	11
Pregnancy and childbirth	11	15
Reduce personal health care costs	11	11
Other health issue	22*	13
Any of the above	75*	59

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults. Margin of error for internet users (N=2,392) is +/- 2.6 percentage points.

#### Internet access drives information access

Since one in five U.S. adults do not go online, the percentage of online health information seekers is lower when calculated as a percentage of the total population: 59% of all adults in the U.S. say they looked online for health information within the past year.

There are two forces at play: access to the internet and interest in health information. For example, women and men are equally likely to have access to the internet, but women are more likely than men to report gathering health information online, which explains the gender gap in the chart below. For the other groups, their overall lower rate of internet adoption combined with lower levels of health information seeking online drives their numbers down significantly when compared with other adults.

<sup>\*</sup> Statistically significant difference compared with others in the same group.

#### Looking online for health information: demographics

		% of <u>adults</u> who go online	% of <u>internet users</u> who look online for health information	% of <u>all adults</u> who look online for health information		
	Total	81%	72%	59%		
	Gender					
а	Male	81	65	53		
b	Female	81	<b>79</b> <sup>a</sup>	64 <sup>a</sup>		
	Race					
а	White	83 <sup>bc</sup>	73	60 <sup>bc</sup>		
b	African American	74	69	51		
С	Latino	73	66	48		
	Age					
а	18-29	95 <sup>bcd</sup>	<b>7</b> 6 <sup>d</sup>	<b>72</b> <sup>cd</sup>		
b	30-49	89 <sup>cd</sup>	75 <sup>d</sup>	67 <sup>cd</sup>		
С	50-64	<b>77</b> <sup>d</sup>	<b>71</b> <sup>d</sup>	<b>54</b> <sup>d</sup>		
d	65+	52	58	30		
	Education					
а	Some high school	47	57	27		
b	High school	<b>72</b> <sup>a</sup>	63	45 <sup>a</sup>		
С	Some college	90 <sup>ab</sup>	<b>74</b> <sup>ab</sup>	67 <sup>ab</sup>		
d	College graduate	96 <sup>abc</sup>	81 <sup>abc</sup>	78 <sup>abc</sup>		
	Household income					
а	< \$30,000	68	65	45		
b	\$30,000 - \$49,999	86 <sup>a</sup>	71	61 <sup>a</sup>		
С	\$50,000 - \$74,999	95 <sup>ab</sup>	81 <sup>ab</sup>	<b>77</b> <sup>ab</sup>		
d	\$75,000+	97 <sup>ab</sup>	80 <sup>ab</sup>	<b>78</b> <sup>ab</sup>		

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.4 percentage points for the full sample. Margins of error for sub-populations are higher.

**Note:** Columns marked with a superscript letter (a) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

(See the Appendix for more detailed information on specific health topics.)

## Younger adults and minorities lead the way with mobile health information search

Some 85% of U.S. adults own a cell phone and, of those, 31% say they have used their phone to look for health or medical information online. Some groups are more likely than others to look for health information on their phones: Latinos, African Americans, those between the ages of 18 and 49, and those who have attended at least some college education.

#### Mobile health information: demographics

% of cell phone owners within each group who use their phones to look for health or medical information online

	All cell phone owners (n=2,581)	31%
а	Men (n=1,163)	29
b	Women (n=1,418)	33
	Age	
а	18-29 (n=451)	42 <sup>cd</sup>
b	30-49 (n=770)	39 <sup>cd</sup>
С	50-64 (n=710)	<b>19</b> <sup>d</sup>
d	65+ (n=599)	9
	Race/ethnicity	
а	White, Non-Hispanic (n=1,586)	27
b	Black, Non-Hispanic (n=434)	35 <sup>a</sup>
С	Hispanic (n=351)	38 <sup>a</sup>
	Annual household income	
а	Less than \$30,000/yr (n=690)	28
b	\$30,000-\$49,999 (n=456)	30
С	\$50,000-\$74,999 (n=345)	37 <sup>a</sup>
d	\$75,000+ (n=646)	37 <sup>a</sup>
	Education level	
а	No high school diploma (n=187)	17
b	High school grad (n=681)	26 <sup>a</sup>
С	Some College (n=679)	<b>33</b> <sup>ab</sup>
d	College + (n=1020)	<b>38</b> <sup>ab</sup>

**Source:** Pew Internet/CHCF Health Survey, August 7-September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish, on landline and cell phones. Margin of error is +/- 2.6 percentage points for results based on cell phone owners.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

## Half of smartphone owners have used their phone to look up health information

Half of cell phone owners in the U.S. (53%) say that they own a smartphone. This translates to 45% of all American adults. Younger people are more likely than older adults to own a smartphone, as are people with higher income and education levels.

### **Who Owns Smartphones**

% of U.S. adults within each group who have a smartphone

	All adults (n=3,014)	45%
а	Men (n=1,337)	46
b	Women (n=1,677)	45
	Age	
а	18-29 (n= 478)	66 <sup>cd</sup>
b	30-49 (n=833)	<b>59</b> <sup>cd</sup>
С	50-64 (n=814)	34 <sup>d</sup>
d	65+ (n=830)	11
	Race/ethnicity	
а	White, Non-Hispanic (n=1,864)	42
b	Black, Non-Hispanic (n=497)	47
С	Hispanic (n=427)	<b>49</b> <sup>a</sup>
	Annual household income	
а	Less than \$30,000/yr (n=876)	35
b	\$30,000-\$49,999 (n=523)	42
С	\$50,000-\$74,999 (n=371)	56 <sup>ab</sup>
d	\$75,000+ (n=680)	68 <sup>abc</sup>
	Education level	
а	No high school diploma (n=269)	21
b	High school grad (n=830)	<b>36</b> <sup>a</sup>
С	Some College (n=778)	50 <sup>ab</sup>
d	College + (n=1,115)	61 <sup>abc</sup>
	Geographic location	
а	Urban (n=1,095)	48 <sup>c</sup>
b	Suburban (n=1,406)	49 <sup>c</sup>
С	Rural (n=396)	29

**Source:** Pew Internet/CHCF Health Survey, August 7-September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish, o landline and cell phones. Margin of error is +/- 2 percentage points for results based on all adults.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

Fifty-two percent of smartphone owners have looked up health information on their phone, compared with just 6% of other cell phone owners.

A person's likelihood to use his or her cell phone to look for health information is amplified by each of the characteristics identified in the tables above: relative youthfulness, having a higher level of education, living in a higher-income household, being Latino, being African American — and owning a smartphone. Each of these observations holds true under statistical analysis isolating each factor. In other words, it is not just that smartphone owners are likely to be younger than other American adults and both groups are likely to use their phones to look up health information. Each characteristic has an independent effect on mobile health information consumption.

#### One in four people seeking health information online have hit a pay wall

Twenty-six percent of internet users who look online for health information say they have been asked to pay for access to something they wanted to see online. Seventy-three percent say they have not faced this choice while seeking health or medical information online.

Of those who have been asked to pay, just 2% say they did so. Fully 83% of those who hit a pay wall say they tried to find the same information somewhere else. Thirteen percent of those who hit a pay wall say they just gave up.

Men, women, people of all ages and education levels were equally likely to report hitting a pay wall when looking for health information. Respondents living in lower-income households were significantly more likely than their wealthier counterparts to say they gave up at that point. Wealthier respondents were the likeliest group to say they tried to find the same information elsewhere. No income group was more likely to say they paid the fee.

### Part Two: Peer-to-peer Healthcare

#### Some seek counsel from fellow patients and caregivers

We have been interested in the social aspect of online health resources since the very beginning of our project. In 2000, we asked people if they had emailed a doctor and if they participated in an online support group for people who shared the same health issues. As social tools proliferated, we adapted our survey questions to fit the current reality.

Now, instead of naming certain websites or services, we describe an activity and track people's use of these resources over time. For example, in the current survey, we did not ask specifically about Facebook, instead focusing on more general social interaction which may take place on a variety of sites. We trust that people know what we mean when we ask if they have, for example, posted a health-related question online and we do not particularly need to know how or where they posted it.

The social life of health information is a steady presence in American life. As we noted above, one in four adults (24%) says that they turned to others who have the same health condition during their last bout with illness, essentially the same finding as in our 2010 survey. One in four internet users (26%) have read or watched someone else's experience about health or medical issues in the last 12 months. And 16% of internet users have gone online to find others who might share the same health concerns in the last year. We explored this phenomenon in greater depth in the 2011 report, Peer-to-peer Healthcare.<sup>1</sup>

Eleven percent of internet users say they have signed up to receive email updates or alerts about health or medical issues in the past year. Twelve percent of internet users have downloaded forms online or applied for health insurance online in the past year, including private insurance, Medicare, or Medicaid. Some of the most striking differences were between those who have health insurance and those who do not (see table below).

<sup>&</sup>lt;sup>1</sup> http://www.pewinternet.org/Reports/2011/P2PHealthcare.aspx

#### Online health activities, by insurance status

% of insured vs. uninsured internet users who have gone online in the past year to....

	Insured (n=2,601)	Uninsured (n=413)
Read/watch someone else's health or medical experience online	22%*	17%
Find others who might have similar health concerns	13	11
Download forms online or applied for health insurance online	10*	6
Receive any email updates or alerts about health or medical issues	9*	6
Any of the above	33*	26

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

Eight percent of internet users say they have, in the past 12 months, posted a health-related question online or shared their own personal health experience online in any way. Of those:

- 40% say they posted comments or stories about personal health experiences
- 19% say they posted specific health questions
- 38% say they posted both

In addition, 78% of those who posted a comment, story, or question about their health say that they did so to reach a general audience of friends or other internet users. Eleven percent say they posted somewhere specifically to get feedback from a health professional. Four percent replied that they posted for both a general and a professional audience and 5% said neither of those choices fit.

#### Health care reviews have not caught on among general consumers

The Pew Internet Project has tracked the use of online consumer reviews since 2000 and it has always ranked among the most popular activities in the commercial realm: 8 in 10 internet users say they have researched a product or service online. By contrast, only about one in five internet users have consulted online reviews and rankings of health care service providers and treatments.

When it comes to writing reviews of general-interest items, 37% of internet users say they have rated a product, service, or person online and 32% have posted a comment or review online about product they bought or service they received. People are much less likely to post a review of a treatment, hospital, or clinician – between 3-4% of internet users have done so.

The results for health-related reviews are comparable to those we recorded in 2010. Consulting online reviews of particular drugs or medical treatments, however, took a noticeable dip in the last two years. Some 18% of internet users do so today, compared to 24% in 2010.

<sup>\*</sup>Statistically significant difference between groups.

### Reviews and rankings online, 2010-2012

% of internet users who consulted or posted online reviews or rankings for the following health-related subjects

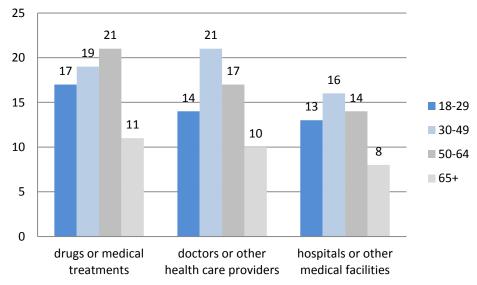
	2010	2012
	(n=2,065)	(n=2,392)
Consulted online reviews of particular drugs or medical treatments	24%*	18%
Consulted online ranking or reviews of doctors or other providers	16	17
Consulted online rankings or reviews of hospitals or medical facilities	15	14
Posted a review online of a doctor	4	4
Posted a review online of a hospital	3	3
Posted your experiences with a particular drug or medical treatment online	4	3

**Source:** Pew Research Center's Internet & American Life Project. Margins of error are +/- 2.6 percentage points for internet users.

Internet users between the ages of 30-64 years old are the most likely group to say they have consulted online reviews and rankings of health treatments and services. Suburban internet users are more likely than rural internet users to consult online health care reviews.

#### Consulting reviews and rankings online, by age

% of internet users within each age group who consulted online reviews or rankings for the following health-related subjects

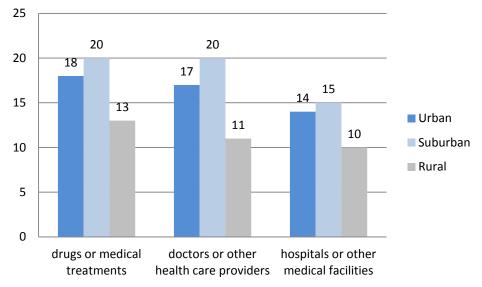


**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

<sup>\*</sup> Statistically significant difference between years.

#### Consulting reviews and rankings online, by urbanity

% of internet users within each group who consulted online reviews or rankings for the following health-related subjects

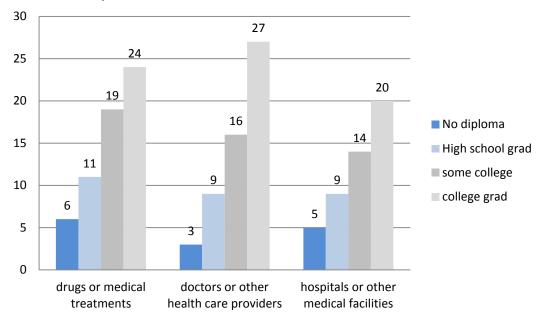


**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

Internet users with higher levels of education were more likely to consult online reviews and rankings than their less-educated counterparts. Those with an annual household income below \$30,000 were less likely than all other income brackets to consult or post health-related reviews and rankings online.

#### Consulting reviews and rankings online, by education

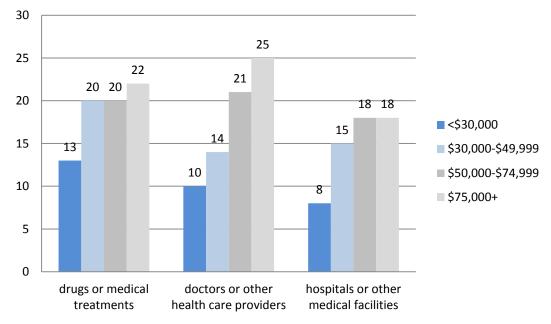
% of internet users within each group who consulted online reviews or rankings for the following health-related subjects



**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

#### Consulting reviews and rankings online, by annual household income

% of internet users within each group who consulted online reviews or rankings for the following health-related subjects

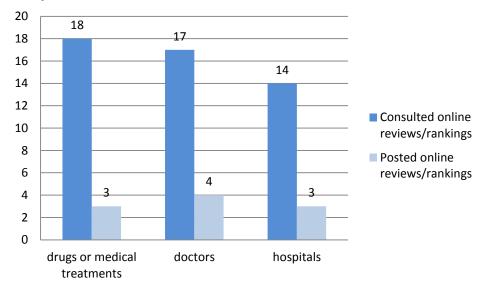


**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

Posting online health reviews and rankings is comparatively infrequent. Just 7% of internet users have ever posted reviews or rankings on any of the three health topics we surveyed: drugs and medical treatments, doctors, and hospitals. This translates into 6% of American adults.

#### Consulting vs. posting online health reviews and rankings

% of internet users who consulted vs. posted online reviews or rankings for the following health-related subjects



**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.6 percentage points for internet users.

Unlike consulting online health rankings and reviews, there are no clear demographic trends when it comes to posting. (See Appendix for details.)

### **Appendix**

Additional details about who has searched for specific health topics.

#### **Health Topics, by Age**

% of all adults who have ever looked online for information about various health topics, by age

	All Adults		A	ge	
	N=3,014	18-29 N=478	30-49 N=833	50-64 N=814	65+ N=830
		(a)	(b)	(c)	(d)
Specific disease or medical problem	45	<b>50</b> <sup>d</sup>	52 <sup>cd</sup>	45 <sup>d</sup>	23
Certain medical treatment or procedure	35	38 <sup>d</sup>	43 <sup>cd</sup>	34 <sup>d</sup>	19
Health insurance, including private insurance, Medicare or Medicaid	20	24 <sup>cd</sup>	25 <sup>cd</sup>	18 <sup>d</sup>	10
Pregnancy and childbirth	10	24 <sup>cde</sup>	12 <sup>de</sup>	1	0
Food safety or recalls	16	<b>17</b> <sup>d</sup>	<b>22</b> <sup>de</sup>	<b>14</b> <sup>d</sup>	7
Drug safety or recalls	13	<b>14</b> <sup>d</sup>	<b>17</b> <sup>d</sup>	13 <sup>d</sup>	4
Medical test results	12	<b>12</b> <sup>d</sup>	<b>14</b> <sup>d</sup>	<b>14</b> <sup>d</sup>	5
How to lose weight or control your weight	22	31 <sup>de</sup>	28 <sup>de</sup>	<b>16</b> <sup>d</sup>	6
How to reduce health care costs	9	<b>10</b> <sup>d</sup>	<b>12</b> <sup>d</sup>	<b>9</b> <sup>d</sup>	3
Caring for an aging relative or friend	12	<b>12</b> <sup>d</sup>	15 <sup>d</sup>	<b>11</b> <sup>d</sup>	4
Drug you saw advertised	13	<b>15</b> <sup>d</sup>	<b>14</b> <sup>d</sup>	<b>14</b> <sup>d</sup>	6
Any other health issue	17	<b>17</b> <sup>d</sup>	<b>21</b> <sup>d</sup>	<b>17</b> <sup>d</sup>	8

**Source:** Pew Internet Health Survey, August 7 – September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 2.4 percentage points for all adults.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

#### **Health Topics, by Education**

% of all adults who have ever looked online for information about various health topics, by education level

			Educ	ation	
	All Adults N=3,014	LT HS N=269	HS N=830	Some Coll. N=778	Coll+ N=1,115
		(a)	(b)	(c)	(d)
Specific disease or medical problem	45	16	<b>31</b> <sup>a</sup>	<b>52</b> <sup>ab</sup>	64 <sup>abc</sup>
Certain medical treatment or procedure	35	10	<b>26</b> <sup>a</sup>	40 <sup>ab</sup>	50 <sup>abc</sup>
Health insurance, including private insurance, Medicare or Medicaid	20	8	12	24 <sup>ab</sup>	30 <sup>abc</sup>
Pregnancy and childbirth	10	8	6	12 <sup>ab</sup>	<b>11</b> <sup>b</sup>
Food safety or recalls	16	8	11	18 <sup>ab</sup>	<b>22</b> <sup>ab</sup>
Drug safety or recalls	13	5	<b>9</b> <sup>a</sup>	15 <sup>ab</sup>	19 <sup>ab</sup>
Medical test results	12	2	<b>6</b> <sup>a</sup>	13 <sup>ab</sup>	22 <sup>abc</sup>
How to lose weight or control your weight	22	11	14	<b>26</b> <sup>ab</sup>	<b>30</b> <sup>ab</sup>
How to reduce health care costs	9	5	6	10 <sup>ab</sup>	13 <sup>ab</sup>
Caring for an aging relative or friend	12	4	<b>8</b> <sup>a</sup>	13 <sup>ab</sup>	<b>16</b> <sup>ab</sup>
Drug you saw advertised	13	4	<b>9</b> <sup>a</sup>	16 <sup>ab</sup>	<b>17</b> <sup>ab</sup>
Any other health issue	17	6	<b>11</b> <sup>a</sup>	<b>20</b> <sup>ab</sup>	<b>24</b> <sup>ab</sup>

**Source:** Pew Internet Health Survey, August 7 – September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 2.4 percentage points for all adults.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

#### Additional details about the health insurance landscape in the U.S.

#### **Health Insurance Coverage, by Type of Insurance**

% of Americans who report having the following types of health insurance...

	All adults (n=3,014)
Private health insurance offered through an employer or union	51%
Medicare	21
Medicaid or some other type of state medical assistance for low-income people	14
Private health insurance paid by the individual	17
Health insurance through any other source, including military or veteran's coverage	12
Total insured	82
Not insured	18

**Source:** Pew Research Center's Internet & American Life Project, August 7-September 6, 2012 Survey. N=3,014 adults and the margin of error is +/- 2.4 percentage points for the full sample.

Women are more likely to have health insurance than men, along with whites and African-Americans compared to Hispanics. Those with a higher income and level of education are also more likely to have health insurance. Very nearly all adults over 65 have health insurance (99%), mostly due to Medicare.

## Health insurance coverage, by demographic group

% of adults within each group who have health insurance

	All adults (n=3,014)	82%
а	Men (n=1,337)	79
b	Women (n=1,677)	86 <sup>a</sup>
	Age	
а	18-29 (n=478)	64
b	30-49 (n=833)	83 <sup>a</sup>
С	50-64 (n=814)	86 <sup>a</sup>
d	65+ (n=830)	99 <sup>abc</sup>
	Race/ethnicity	
а	White, Non-Hispanic (n=1,864)	87 <sup>bc</sup>
b	Black, Non-Hispanic (n=497)	81 <sup>c</sup>
С	Hispanic (n=427)	63
	Annual household income	
а	Less than \$30,000/yr (n=876)	67
b	\$30,000-\$49,999 (n=523)	84 <sup>a</sup>
С	\$50,000-\$74,999 (n=371)	<b>95</b> <sup>ab</sup>
d	\$75,000+ (n=680)	<b>96</b> <sup>ab</sup>
	<b>Education level</b>	
а	No high school diploma (n=269)	67
b	High school grad (n=830)	78 <sup>a</sup>
С	Some College (n=778)	82 <sup>a</sup>
d	College + (n=1,115)	94 <sup>abc</sup>

**Source:** Pew Research Center's Internet & American Life Project, August 7 September 6, 2012 Survey. N=3,014 adults and the margin of error is +/-2.4 percentage points for the full sample. Margins of error for subpopulations are higher.

**Note:** Columns marked with a superscript letter (<sup>a</sup>) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

Additional details about those who post reviews online.

#### **Posting Online Health Reviews and Rankings**

% of adults within each group who post online health reviews or rankings

	All internet users (n=2,392)	7%
а	Men (n=1,084)	7
b	Women (n=1,208)	8
	Age	
а	18-29 (n=454)	5
b	30-49 (n=759)	9 <sup>ad</sup>
С	50-64 (n=668)	<b>8</b> <sup>d</sup>
d	65+ (n=463)	4
	Race/ethnicity	
а	White, non-Hispanic (n=1,531)	7
b	Black, non-Hispanic (n=348)	7
С	Hispanic (n=314)	9
	Annual household income	
а	Less than \$30,000/yr (n=559)	5
b	\$30,000-\$49,999 (n=439)	<b>11</b> <sup>a</sup>
С	\$50,000-\$74,999 (n=352)	6
d	\$75,000+ (n=660)	<b>9</b> <sup>a</sup>
	<b>Education Level</b>	
а	No high school diploma (n=107)	4
b	High school grad (n=574)	6
С	Some college (n=656)	7
d	College+ (n=1,046)	9 <sup>b</sup>

**Source:** Pew Internet Health Survey, August 7 – September 6, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 2.4 percentage points for all adults.

**Note:** Columns marked with a superscript letter (a) or another letter indicate a statistically significant difference between that row and the row designated by that superscript letter. Statistical significance is determined inside the specific section covering each demographic trait.

### **Survey questions**

#### **Health Tracking Survey 2012**

Revised Topline

11/27/2012

Data for August 7-September 6, 2012

Princeton Survey Research Associates International for the Pew Research Center's Internet & American Life Project

Sample: n=3,014 national adults, age 18 and older, including 1,206 cell phone interviews Interviewing dates: 08.07.2012 – 09.06.2012

Margin of error is plus or minus 2.4 percentage points for results based on total [n=3,014] Margin of error is plus or minus 2.6 percentage points for results based on internet users [n=2,392] Margin of error is plus or minus 2.6 percentage points for results based on cell phone owners [n=2,581] Margin of error is plus or minus 3.1 percentage points for results based on online health seekers [n=1,741] Margin of error is plus or minus 3.8 percentage points for results based on caregivers [n=1,171]

Q1 Overall, how would you rate the quality of life for you and your family today? Would you say it is excellent, very good, good, fair or poor?

Current EXCELLENT VERY GOOD GOOD FAIR POOR DON'T KNOW<sup>2</sup> REFUSED

\* \* \*

<sup>&</sup>lt;sup>2</sup> For this question and many others throughout the topline, results for "Don't know" often reflect combined "Don't know" and "Refused" percentages. DK and REF are reported separately where available.

**INTUSE** Do you use the internet, at least occasionally?

**EMLOCC**Do you send or receive email, at least occasionally?

**INTMOB**Do you access the internet on a cell phone, tablet or other mobile handheld device, at least occasionally?<sup>3</sup>

**QL1** Do you have a cell phone... or a Blackberry or iPhone or other device that is also a cell phone?<sup>4</sup>

	YES	NO	DON'T KNOW	REFUSED
	85	15	*	0
Current				

**SMPH** Some cell phones are called "smartphones" because of certain features they have. Is your cell phone a smartphone, such as an iPhone, Android, Blackberry or Windows phone, or are you not sure?<sup>5</sup>

Based on cell phone owners

<sup>&</sup>lt;sup>3</sup> The definition of an internet user varies from survey to survey. From January 2005 thru February 2012, an internet user is someone who uses the internet at least occasionally or sends/receives email at least occasionally (two-part definition with question wording "Do you use the internet, at least occasionally?" OR "Do you send or receive email, at least occasionally?"). Prior to January 2005, an internet user is someone who goes online to access the internet or to send and receive email (question wording "Do you ever go online to access the Internet or World Wide Web or to send and receive email?").

<sup>&</sup>lt;sup>4</sup> Question was asked of landline sample only. Results shown here have been recalculated to include cell phone sample in the "Yes" percentage. In past polls, question was sometimes asked as an independent question and sometimes as an item in a series. In January 2010, question wording was "Do you have...a cell phone or a Blackberry or iPhone or other handheld device that is also a cell phone." In Dec 2008, Nov 2008, May 2008, January 2005 and Nov 23-30 2004, question wording was "Do you happen to have a cell phone?" In August 2008, July 2008 and January 2008, question wording was "Do you have a cell phone, or a Blackberry or other device that is also a cell phone?" In April 2008, Dec 2007, Sept 2007 and April 2006, question wording was "Do you have a cell phone?" Beginning December 2007, question/item was not asked of the cell phone sample, but results shown here reflect Total combined Landline and cell phone sample.

<sup>&</sup>lt;sup>5</sup> Prior to the current survey, question wording was slightly different: "Some cell phones are called 'smartphones' because of certain features they have. Is your cell phone a smartphone or not, or are you not sure?"

**CELL1** Please tell me if you ever use your cell phone to do any of the following things. Do you ever use your cell phone to [INSERT ITEMS; ALWAYS ASK a-b FIRST in order; RANDOMIZE c-f]?<sup>6</sup>

Based on cell phone owners

		YES	NO	DON'T KNOW	REFUSED
a.	Send or receive email  Current [N=2,581]	50	50	*	0
b.	Send or receive text messages Current	80	20	*	0
c.	Take a picture  Current	82	18	*	*
d.	Access the internet <sup>7</sup> Current	56	44	0	0
e.	Look for health or medical information online <sup>8</sup> Current	31	69	*	*
f.	Check your bank account balance or do any online banking <sup>9</sup> Current	29	70	*	*

\_

<sup>&</sup>lt;sup>6</sup> In May 2011, the question was asked of all Form B cell phone owners and Form A cell phone owners who said in CELL7 that they do more than make calls on their phone. The percentages shown here are based on all cell phone users, counting as "no" Form A cell phone owners who said in CELL7 they use their phones only for making calls. Prior to May 2011, question was asked of all cell phone owners. Prior to January 2010, question wording was "Please tell me if you ever use your cell phone or Blackberry or other device to do any of the following things. Do you ever use it to [INSERT ITEM]?" In January 2010, question wording was "Please tell me if you ever use your cell phone or Blackberry or other handheld device to do any of the following things. Do you ever use it to [INSERT ITEMS]?" For January 2010, December 2009, and September 2009, an answer category "Cell phone can't do this" was available as a volunteered option; "No" percentages for those trends reflect combined "No" and "Cell phone can't do this" results.

<sup>&</sup>lt;sup>7</sup> In December 2007, item wording was "Access the internet for news, weather, sports, or other information"

<sup>&</sup>lt;sup>8</sup> In April 2012, question was asked of cell phone owners who use the internet or email on their cell phone or download apps to their cell phone [N=953]; results are re-percentaged on all cell phone owners. In September 2010, question was a standalone question with the following question wording: "Do you ever use your cell phone to look up health or medical information?"

<sup>&</sup>lt;sup>9</sup> In April 2012, question was asked of Form A cell phone owners who use the internet or email on their cell phone or download apps to their cell phone [N=953]; results are re-percentaged on all Form A cell phone owners.

Switching topics... In general, how would you rate your own health — excellent, good, only fair, or poor?

	CURRENT	
%	28	Excellent
	52	Good
	16	Only fair
	4	Poor
	*	Don't know
	*	Refused

# Are you now living with any of the following health problems or conditions? First, [INSERT ITEM; RANDOMIZE a-e; ITEM f ALWAYS LAST]? And what about... [INSERT ITEM]? [IF NECESSARY: Are you now living with [INSERT ITEM]?]

		YES	NO	DON'T KNOW	REFUSED
a.	Diabetes or sugar diabetes  Current	11	88	*	*
b.	High blood pressure  Current	25	74	1	*
C.	Asthma, bronchitis, emphysema, or other lung conditions  Current	13	86	*	*
d.	Heart disease, heart failure or heart attack Current	7	92	*	*
e.	Cancer Current	3	96	*	*
f.	Any other chronic health problem or condition I haven't already mentioned  Current	16	83	*	*

#### Q4 In the last 12 months, have you personally...[INSERT ITEMS IN ORDER]?

		YES	NO	DON'T KNOW	REFUSED
a.	Faced a serious medical emergency or crisis 10				
	Current	11	89	*	*
b.	Gone to the emergency room or been hospitalized unexpectedly				
	Current	17	83	*	*

 $<sup>^{10}</sup>$  In September 2010, question was asked as a standalone question. For December 2008 and earlier, trend question wording was: "And in the last 12 months, have you or has someone close to you faced a serious medical emergency or crisis?"

 Experienced any significant change in your physical health, such as gaining or losing a lot of weight, becoming pregnant, or quitting smoking<sup>11</sup>

18 81 \* \*
Current

Thinking about the LAST time you had a serious health issue or experienced any significant change in your physical health... Did you get information, care or support from... [INSERT ITEM; RANDOMIZE]? [IF YES AND INTERNET USER: Did you interact with them ONLINE through the internet or email, OFFLINE by visiting them in person or talking on the phone, or BOTH online and offline?]<sup>12</sup>

		YES, ONLINE	YES, OFFLINE	YES, BOTH	NO, NOT A SOURCE	DON'T KNOW	REFUSED	
a.	A doctor or other health care professional							
	Current	1	61	8	28	1	1	
b.	Friends and family							
	Current	1	39	20	39	*	1	
c.	Others who have the same health condition							
	Current	2	15	7	73	1	1	

<sup>&</sup>lt;sup>11</sup> In September 2010, question was asked as a standalone question with the following question wording: "And in the last 12 months, have you experienced any other significant change in your physical health, such as gaining or losing a lot of weight, becoming pregnant, or guitting smoking?"

<sup>&</sup>lt;sup>12</sup> September 2010 question wording was slightly different: "Thinking about the LAST time you had a health issue, did you get information, care or support from... [INSERT; RANDOMIZE]? [IF YES AND INTERNET USER: Did you interact with them ONLINE through the internet or email, OFFLINE by visiting them in person or talking on the phone, or BOTH online and offline?]"

[READ TO ALL:] On another topic...

CARE2 In the past 12 months, have you provided UNPAID care to an adult relative or friend 18 years or older to help them take care of themselves? Unpaid care may include help with personal needs or household chores. It might be managing a person's finances, arranging for outside services, or visiting regularly to see how they are doing. This person need not live with you.

[IF R ASKS IF GIVING MONEY COUNTS, ASK:] Aside from giving money, do you provide any other type of unpaid care to help them take care of themselves, such as help with personal needs, household chores, arranging for outside services, or other things?

	CURRENT	
%	36	Yes
	64	No
	*	Don't know
	*	Refused

**CARE3** Do you provide this type of care to just one adult, or do you care for more than one adult?

Based on those who provide unpaid care to adults

- **CARE4** [ASK IF PROVIDE UNPAID CARE TO ONE ADULT:] Is this person your parent or your mother-in-law or father-in-law, or not?<sup>13</sup>
- CARE5 [ASK IF PROVIDE UNPAID CARE TO MULTIPLE ADULTS, DON'T KNOW OR REFUSED:]

  Are any of the adults you care for your parent or your mother-in-law or father-in-law, or not?<sup>14</sup>

Based on those who provide unpaid care to adults

**CARE6** In the past 12 months, have you provided UNPAID care to any CHILD under the age of 18 because of a medical, behavioral, or other condition or disability? This could include care for ongoing medical conditions or serious short-term conditions, emotional or behavioral problems, or developmental problems, including mental retardation.

	CURRENT	
%	8	Yes
	92	No
	*	Don't know
	*	Refused

<sup>13</sup> September 2010 question wording was slightly different: "Is this person a parent of yours, or not?"

<sup>&</sup>lt;sup>14</sup> September 2010 question wording was slightly different: "Are any of the adults you care for a parent of yours, or not?"

Now, we'd like to know if you've looked for information ONLINE about certain health or medical issues, either for yourself or someone else. Specifically, in the last 12 months, have you looked online for information about... [INSERT FIRST ITEM; ASK a-b FIRST IN ORDER THEN RANDOMIZE c-k; ITEM L ALWAYS LAST]? In the last 12 months, have you looked online for information about... [INSERT NEXT ITEM]?<sup>15</sup>

Based on all internet users [N=2,392]

		YES, HAVE DONE THIS	NO, HAVE NOT DONE THIS	DON'T KNOW	REFUSED
a.	A specific disease or medical problem  Current	55	44	*	*
b. c.	A certain medical treatment or procedure  Current  Health insurance, including private	43	56	*	*
	insurance, Medicare or Medicaid  Current	25	75	*	*
d.	Pregnancy and childbirth  Current	12	88	0	*
e.	Food safety or recalls  Current	19	80	*	*
f.	Drug safety or recalls	16	84	*	*
g.	Current  Medical test results	15	85	*	*
h.	Current  How to lose weight or how to control your weight	13	83		
	Current	27	73	*	*
i.	How to reduce your health care costs  Current	11	89	*	*

<sup>&</sup>lt;sup>15</sup> Prior to the current survey, question wording was: "Now, we'd like to ask if you've looked for information ONLINE about certain health or medical issues. Specifically, have you ever looked online for... [INSERT ITEM]?" List of items may vary from survey to survey. The phrase "in the last 12 months" was added in the 2012 survey.

		YES, HAVE DONE THIS	NO, HAVE NOT DONE THIS	DON'T KNOW	REFUSED
j.	Caring for an aging relative or friend Current	14	86	*	*
k.	A drug you saw advertised  Current	16	84	*	*
I.	Any other health issue Current	20	79	*	*
	Total yes to any item above  Total no to all items	72 28			

Q7 Thinking about the LAST time you went online for health or medical information... Did you go online to look for information related to YOUR OWN health or medical situation or SOMEONE ELSE'S health or medical situation?

Based on online health seekers

	CURRENT	
%	39	Own
	39	Someone else's
	15	Both (VOL.)
	3	Don't know
	3	Refused
	[n=1,741]	

**Q8** Still thinking about the LAST time you went online to look for health information... How did you begin looking? Did you start... [READ 1-4 IN ORDER]

Based on online health seekers [N=1,741]

	CURRENT	
%	77	At a search engine such as Google, Bing or Yahoo
	13	At a site that specializes in health information, like WebMD
	2	At a more general site like Wikipedia, that contains information on all kinds of topics, OR
	1	At a social network site like Facebook?
	3	(VOL.) Other (SPECIFY)
	2	(VOL.) Don't know
	2	(VOL.) Refused

There is no Question Q9.

**Q10** When looking for health information online, have you ever been asked to PAY for access to something you wanted to see on the internet?

Based on online health seekers [N=1,741]

The last time you were asked to PAY to access health content online, what did you do? Did you... [READ 1-3; READ CATEGORIES IN REVERSE ORDER FOR HALF THE SAMPLE]

Based on online health seekers who have been asked to pay for health content online [N=456]

Q12 Have you ever gone online specifically to try to figure out what medical condition you or someone else might have?

Based on online health seekers [N=1,741]

Q13 Did the information you found online lead you to think that this was a condition that needed the attention of a doctor or other medical professional, or that it was something you could take care of at home?

Based on online health seekers who have gone online to figure out what medical condition they or someone else might have [N=1,003]

	CURRENT	
%	46	Needed attention of doctor
	38	Could take care of at home
	11	Both/in-between (VOL.)
	4	Don't know
	1	Refused

Q14 Did you happen to talk with a medical professional about what you found online?

Based on online health seekers who have gone online to figure out what medical condition they or someone else might have [N=1,003]

Q15 Did a medical professional confirm what you thought the condition was with a medical diagnosis, did they offer a different medical opinion or diagnosis, or did you not visit a doctor or other medical professional for a diagnosis?

Based on online health seekers who have gone online to figure out what medical condition they or someone else might have [N=1,003]

	CURRENT	
%	41	Yes, confirmed
	18	No, did not confirm/offered different diagnosis
	35	Did not visit a doctor or medical professional for a diagnosis
	2	Confirmed part but not all of R's diagnosis (VOL.)
	1	Medical professional was unable to diagnose (VOL.)
	1	Don't know
	1	Refused

Apart from looking for information online, there are many different activities related to health and medical issues a person might do on the internet. I'm going to read a list of online health-related activities you may or may not have done in the last 12 months. Just tell me if you happened to do each one, or not. (First,) in the last 12 months, have you... [INSERT ITEM; RANDOMIZE]? In the last 12 months, have you....[INSERT ITEM]?

		YES	NO	DON'T KNOW	REFUSED
a.	Signed up to receive email updates or alerts about health or medical issues				
	Current internet users [N=2,392]	11	89	*	*
b.	Read or watched someone else's commentary or personal experience about health or medical issues online				
	Current internet users	26	74	*	*
C.	Gone online to find others who might have health concerns similar to yours				
	Current internet users	16	84	*	*
d.	Downloaded forms online or applied for health insurance online, including private insurance, Medicare, or Medicaid				
	Current internet users	12	88	*	0

Still thinking just about the last 12 months, have you posted a health-related question online or shared your own personal health experience online in any way?

Based on all internet users [N=2,392]

	CURRENT	
%	8	Yes
	92	No
	*	Don't know
	0	Refused

Q18 And what was it that you posted or shared online? Was it a specific QUESTION about your health, a COMMENT or STORY about your personal health experience, or BOTH a question and a comment?

Based on internet users who have posted about a health topic or shared a health experience online [N=173]

	CURRENT	
%	19	Specific health question
	40	Comments/Stories about personal health experiences
	38	Both
	2	Neither/Something else (VOL.)
	1	Don't know
	_	
	0	Refused

Q19 And the LAST time you posted or shared health material online, did you post it somewhere specifically to get feedback from a health professional, or did you post it somewhere it would be read by a more general audience of friends or other internet users?

Based on internet users who have posted about a health topic or shared a health experience online [N=173]

	CURRENT	
%	11	Health professional
	78	More general audience
	4	Both (VOL.)
	5	Neither/Something else (VOL.)
	1	Don't know
	0	Refused

## Thinking again about health-related activities you may or may not do online, have you... [INSERT ITEM; RANDOMIZE]? (Next,) have you...[INSERT ITEM]?<sup>16</sup>

		YES	NO	DON'T KNOW	REFUSED
a.	Consulted online rankings or reviews of doctors or other providers <sup>17</sup>				
	Current internet users [N=2,392]	17	83	*	*
b.	Consulted online rankings or reviews of hospitals or other medical facilities <sup>18</sup>				
	Current internet users	14	86	*	0
C.	Consulted online reviews of particular drugs or medical treatments				
	Current internet users	18	82	1	*
d.	Posted a review online of a doctor				
	Current internet users	4	96	0	0
e.	Posted a review online of a hospital				
	Current internet users	3	97	*	*
f.	Posted your experiences with a particular drug or medical treatment online				
	Current internet users	3	97	*	0

-

<sup>&</sup>lt;sup>16</sup> Current question was asked of all internet users. September 2010 trend question was also asked of all internet users, with items asked in rotated order. December 2008 trend question was asked of online health seekers, with the following question wording: "There are many different activities related to health and medical issues a person might do on the internet. I'm going to read a list of things you may or may not have ever done online related to health and medical issues. Just tell me if you happened to do each one, or not. Have you... [INSERT ITEM; ROTATE]?"

<sup>17</sup> December 2008 trend item wording was "Consulted rankings or reviews online of doctors or other providers"

<sup>&</sup>lt;sup>18</sup> December 2008 trend item wording was "Consulted rankings or reviews online of hospitals or other medical facilities"

[READ TO CELL PHONE OWNERS:] Now thinking about how you might use your cell phone to help manage your health...

Q21 Do you receive any TEXT updates or alerts about health or medical issues, such as from your doctors or pharmacists?

Based on cell phone owners who text message [N=1,896]

On your cell phone, do you happen to have any software applications or "apps" that help you track or manage your health, or not?

Based on cell phone owners

# What kind of health apps do you currently have on your phone? [IF NECESSARY, CLARIFY: What health issue or topic do your apps deal with?] [DO NOT READ; PRECODED OPEN-END]

Based on those who have health apps on their cell phone [N=254]

	CURRENT	
%	38	Exercise, fitness, pedometer or heart rate monitoring (includes specific types of
	31	exercise like running, ab workouts, yoga, etc.) Diet, food, calorie counter
	12	Weight
	7	Period or menstrual cycle
	5	Blood pressure
	4	WebMD
	3	Pregnancy
	2	Blood sugar or diabetes
	2	Medication management (tracking, alerts, etc.)
	*	Mood
	*	Sleep
	14	Other (SPECIFY)
	6	Don't know
	*	Refused

Note: Total may exceed 100% due to multiple responses.

[READ TO ALL:] A few last questions for statistical purposes only...

INS1 Now I would like to ask you about any health insurance you CURRENTLY have that helps pay for the cost of health care. I'm going to read a list of a few types of health insurance, and I'd like you to tell me which of these you have, if any. (First,) are you now PERSONALLY covered by [INSERT ITEMS IN ORDER]?

[IF RESPONDENT NOT SURE WHICH INSURANCE IS INCLUDED: Please think about insurance plans that cover the costs of doctor and hospital bills IN GENERAL, and NOT those that cover ONLY dental or eye care or the costs of caring for specific diseases.]

[IF RESPONDENTS TRY TO TELL TYPE THEY HAVE INSTEAD OF GOING THROUGH THE LIST: I'm sorry but I have to ask about each type of insurance for the survey. Just tell me 'no' if you don't have this type.]

		YES	NO	DON'T KNOW	REFUSED
a.	Private health insurance offered through an employer or union [IF "NO": This could be				
	insurance through a current job, a former job, your job or someone else's job.]	51	47	1	1
b.	A private health insurance plan that you bought yourself	17	82	1	1
C.	Medicaid, [IF STATE CALIFORNIA: Medi-Cal], or some other type of state medical assistance for low-income people	14	85	1	*
d.	Medicare, the government program that pays health care bills for people over age 65 and for some disabled people	21	78	1	*
	m E: Based on those who are not insured through				
•	vate health insurance, Medicaid, or Medicare :526]				
e.	Health insurance through ANY other source, including military or veteran's coverage	12	87	*	1

INS2 Medicare is health insurance coverage most people receive when they turn 65 and are eligible for Social Security. This includes different kinds of health plans offered THROUGH the Medicare program — like the plans called H-M-Os. Are you now covered by Medicare or by ANY Medicare plan?

Based on those age 65 and older who are not covered by Medicare [N=82]

	CORREINI	
%	38	Yes, covered
	56	No, not covered
	3	Don't know
	_	
	3	Refused

CUDDENT

## **INS3** Does this mean you personally have NO health insurance now that would cover your doctor or hospital bills?

Based on those who are not covered by any health insurance or are undesignated [N=450]

	CURRENT	
%	91	I do NOT have health insurance
	7	I HAVE some kind of health insurance
	1	Don't know
	2	Refused

#### **SUMMARY OF INSURANCE STATUS (BASED ON INS1, INS2, INS3)**

$$\% \begin{tabular}{ll} \hline & $\underbrace{\mbox{CURRENT}} \\ 82 & \mbox{Insured} \\ 18 & \mbox{Not insured} \\ \hline \end{tabular}$$

The remaining demographic questions are not reported in this topline.

### Methodology

#### **Summary**

The 2012 Health Survey, sponsored by the Pew Research Center's Internet & American Life Project and the California HealthCare Foundation, obtained telephone interviews with a nationally representative sample of 3,014 adults living in the United States. Telephone interviews were conducted by landline (1,808) and cell phone (1,206, including 624 without a landline phone). The survey was conducted by Princeton Survey Research Associates International. Interviews were done in English and Spanish by Princeton Data Source from August 7 to September 6, 2012. Statistical results are weighted to correct known demographic discrepancies. The margin of sampling error for the complete set of weighted data is ±2.4 percentage points.

#### **DESIGN AND DATA COLLECTION PROCEDURES**

#### Sample Design

A combination of landline and cell random digit dial (RDD) samples was used to reach a representative sample of all adults the United States who have access to either a landline or cellular telephone. Both samples were disproportionately-stratified to increase the incidence of African-American and Hispanic respondents. Within strata, phone numbers were drawn with equal probabilities. The landline samples were list-assisted and drawn from active blocks containing three or more residential listing while the cell samples were not list-assisted, but were drawn through a systematic sampling from dedicated wireless 100-blocks and shared service 100-blocks with no directory-listed landline numbers.

#### **Contact Procedures**

Interviews were conducted from August 7 to September 6, 2012. As many as 7 attempts were made to contact every sampled telephone number. Sample was released for interviewing in replicates, which are representative subsamples of the larger sample. Using replicates to control the release of sample ensures that complete call procedures are followed for the entire sample. Calls were staggered over times of day and days of the week to maximize the chance of making contact with potential respondents. Each phone number received at least one daytime call.

For the landline sample, interviewers asked to speak with either the youngest male or youngest female currently at home based on a random rotation. If no male/female was available at the time of the call, interviewers asked to speak with the youngest adult of the opposite sex. This systematic respondent selection technique has been shown to produce samples that closely mirror the population in terms of age and gender when combined with cell sample.

For the cell sample, interviews were attempted with the person who answered the phone. Interviewers first verified that the person was and adult and in a safe place before continuing with the interview.

#### WEIGHTING AND ANALYSIS

Weighting is generally used in survey analysis to adjust for effects of the sample design and to compensate for patterns of nonresponse that might bias results. The weighting was accomplished in

multiple stages to account for the disproportionately-stratified sample, the overlapping landline and cell sample frames and differential non-response associated with sample demographics.

The first-stage of weighting compensated for the disproportionate sample design. This adjustment (called SAMPWT in the dataset) was computed by dividing the proportion of the population from each stratum by the proportion of sample drawn from the stratum. The landline and cell samples were drawn using the same relative sampling fractions within strata so the. Table 1 shows the SAMPWT values by strata.

Table 1. SAMPWT by Stratum

	Population	Sample	
Strata	Dist'n	Dist'n	SAMPWT
1	10.8%	4.1%	2.63
2	9.0%	3.4%	2.63
3	9.8%	3.7%	2.63
4	9.5%	3.6%	2.63
5	10.6%	8.1%	1.31
6	9.0%	10.2%	0.88
7	9.7%	11.1%	0.88
8	11.4%	17.4%	0.66
9	9.3%	17.8%	0.53
10	10.7%	20.5%	0.53

The second stage of weighting corrected for different probabilities of selection based on the number of adults in each household and each respondents telephone use (i.e., whether the respondent has access to a landline, to a cell phone or to both types of phone).

The second-stage weight can be expressed as:

$$\frac{1}{LLi \ \left(\frac{S_{LL}}{S_{CP}} \times \frac{1}{AD_i}\right) + (CP_i \times R)}$$

LL<sub>i</sub> =1 if respondent has a landline phone and =0 if respondent has no landline phone

=1 if respondent has a cell phone and =0 if respondent has no cell phone

S<sub>LL</sub> the size of the landline sample

 $S_{CP}$  the size of the cell sample

CP

R the estimated ratio of the size of the landline sample frame to the size of the cell

#### sample frame. For this survey R=0.55.

Both adjustments were incorporated into a first-stage weight that was used as an input weight for post-stratification. The data was raked to match sample distributions to population parameters. The African-American and White/Other samples were raked to match parameters for sex by age, sex by education, age by education and region. Hispanics were raked to match population parameters for sex by age, sex by education, age by education and region. In addition, the Hispanic group was raked to a nativity parameter.

The combined data was then raked to match population parameters for sex by age, sex by education, age by education, region, household phone use and population density. The white, non-Hispanic subgroup was also balanced by age, education and region. The telephone usage parameter was derived from an analysis of recently available National Health Interview Survey data<sup>19</sup>. The population density parameter is county-based and was derived from Census 2000 data. All other weighting parameters were derived from the Census Bureau's 2011 Annual Social and Economic Supplement (ASEC).

This stage of weighting, which incorporated each respondent's first-stage weight, was accomplished using Sample Balancing, a special iterative sample weighting program that simultaneously balances the distributions of all variables using a statistical technique called the *Deming Algorithm*. The raking corrects for differential non-response that is related to particular demographic characteristics of the sample. This weight ensures that the demographic characteristics of the sample closely approximate the demographic characteristics of the population. Table 2 compares full sample weighted and unweighted sample demographics to population parameters.

<sup>&</sup>lt;sup>19</sup> Blumberg SJ, Luke JV. Wireless substitution: Early release of estimates from the National Health Interview Survey, July-December, 2011. National Center for Health Statistics. June 2012.

Table 2. Sample Demographics

	<u>Parameter</u>	Unweighted	Weighted
<u>Gender</u>			
Male	48.6	44.4	48.9
Female	51.4	55.6	51.1
<u>Age</u>			
18-24	12.8	10.0	12.8
25-34	18.0	12.4	17.5
35-44	17.2	13.2	17.3
45-54	19.0	17.8	19.2
55-64	16.0	18.5	16.0
65+	17.0	28.1	17.3
Education (changed)			
Less than HS Graduate	13.3	9.0	11.7
HS Graduate	30.4	27.7	30.6
Some College/Assoc	28.5	26.0	28.8
Degree Craduate	28.3 27.8	37.3	28.9
College Graduate	27.0	37.3	20.9
Race/Ethnicity			
White/not Hispanic	67.8	63.0	68.1
Black/not Hispanic	11.5	16.8	11.8
Hisp - US born	6.6	7.6	6.6
Hisp - born outside	7.4	6.8	7.0
Other/not Hispanic	6.7	5.7	6.5
Other/not Hispanio	0.7	3.7	0.0
Region			
Northeast	18.3	16.4	19.2
Midwest	21.7	19.0	22.1
South	36.8	41.5	36.1
West	23.2	23.0	22.6
			(continued)
			,
Table 2. Sample Demographi	cs (continue	ed)	

County Pop. Density			
1 - Lowest	20.1	18.8	20.4
2	20.0	18.0	20.1
3	20.1	18.9	20.2
4	20.2	20.0	19.9
5 - Highest	19.6	24.4	19.3

Household Phone Use				
LLO	7.0	7.9	7.2	
Dual - few,some cell	39.0	54.4	40.3	
Dual - most cell	18.8	16.9	18.9	
СРО	35.2	20.8	33.6	

#### Effects of Sample Design on Statistical Inference

Post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. PSRAI calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response. The total sample design effect for this survey is 1.75.

PSRAI calculates the composite design effect for a sample of size n, with each case having a weight,  $w_i$  as:

$$deff = \frac{n\sum_{i=1}^{n} w_{i}^{2}}{\left(\sum_{i=1}^{n} w_{i}\right)^{2}}$$
 formula 1

In a wide range of situations, the adjusted *standard error* of a statistic should be calculated by multiplying the usual formula by the square root of the design effect (*Vdeff*). Thus, the formula for computing the 95% confidence interval around a percentage is:

$$\hat{p} \pm \left(\sqrt{\text{deff}} \times 1.96 \sqrt{\frac{\hat{p}(1-\hat{p})}{n}}\right)$$
 formula 2

where  $\hat{p}$  is the sample estimate and n is the unweighted number of sample cases in the group being considered.

The survey's margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample— the one around 50%. For example, the margin of error for the entire sample is  $\pm 2.4$  percentage points. This means that in 95 out of every 100 samples drawn using the same methodology, estimated proportions based on the entire sample will be no more than 2.4 percentage points away from their true values in the population. It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as respondent selection bias, question wording and reporting inaccuracy may contribute additional error of greater or lesser magnitude. Table 3 shows design effects and margins of error for key subgroups.

Table 3. Design Effects and Margins of Sampling Error

	Sample	Design	
	Size	Effect	Margin of Error
Total Sample	3,014	1.75	2.4 percentage points
White, not Hispanic	1,864	1.75	3.0 percentage points
African American, not Hispanic	497	1.62	5.6 percentage points
Hispanic	427	1.56	5.9 percentage points

#### **RESPONSE RATE**

Table 4 reports the disposition of all sampled telephone numbers ever dialed from the original telephone number samples. The response rate estimates the fraction of all eligible sample that was ultimately interviewed.<sup>20</sup>

**Table 4. Sample Disposition** 

Landline	Cell	
1807	1205	I=Completes
8660	10980	R=Refusal and breakoff
3941	5570	NC=Non contact
164	87	O=Other
40051	13668	OF=Business/computer/not working/child's cell phone
4225	619	UH/UO=Unknown household/Unknown other
0.27	0.57	AAPOR's e=(I+R+NC+O)/(I+R+NC+O+OF)
11.5%	6.6%	AAPOR RR3=I/[I+R+NC+O+(e*UH/UO)]

 $^{20}$  The sample disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.