

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]

Note: The following questions are only those included in this report. A full topline may be obtained from the authors.

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?

	EXCELLENT	VERY GOOD	GOOD	FAIR	POOR	DON'T KNOW ¹	REFUSED
Current	17	26	32	19	5	*	*

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?

	USES INTERNET	DOES NOT USE INTERNET
Current	81	19

¹ 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.

QL1 Do you have a cell phone... or a Blackberry or iPhone or other device that is also a cell phone?

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

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?²

Based on cell phone owners

	CURRENT		APRIL 2012	FEB 2012	MAY 2011
%	53	Yes, smartphone	46	45	33
	40	No, not a smartphone	44	46	53
	6	Not sure/Don't know	10	8	14
	*	Refused	*	*	*
	[n=2,581]		[n=1,954]	[n=1,961]	[n=1,914]

Q2 Switching topics... In general, how would you rate your own health — excellent, good, only fair, or poor?

	CURRENT		SEPT 2010	DEC 2008	AUGUST 2006	DECEMBER 2002
%	28	Excellent	30	29	33	35
	52	Good	49	51	47	48
	16	Only fair	16	14	14	12
	4	Poor	5	5	4	4
	*	Don't know	*	*	1	1
	*	Refused	*	*	--	--

² 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?"

Q3 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 ³				
Current	11	89	*	*
b. Gone to the emergency room or been hospitalized unexpectedly				
Current	17	83	*	*
c. Experienced any significant change in your physical health, such as gaining or losing a lot of weight, becoming pregnant, or quitting smoking ⁴				
Current	18	81	*	*

[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

³ 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?"

⁴ 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 quitting smoking?"

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

	<u>CURRENT</u>	
%	66	One adult only
	34	Provide care to multiple adults
	*	Don't know
	*	Refused

[n=1,085]

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?⁵

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?⁶

Based on those who provide unpaid care to adults

	<u>CURRENT</u>	
%	47	Yes, parent or mother-in-law/father-in-law
	53	No, not a parent or mother-in-law/father-in-law
	*	Don't know
	*	Refused

[n=1,085]

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.

	<u>CURRENT</u>	
%	8	Yes
	92	No
	*	Don't know
	*	Refused

⁵ September 2010 question wording was slightly different: "Is this person a parent of yours, or not?"

⁶ September 2010 question wording was slightly different: "Are any of the adults you care for a parent of yours, or not?"

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

Q22 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

	<u>CURRENT</u>	
%	11	Yes
	88	No
	1	Don't know
	*	Refused

[n=2,581]

Q23 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 exercise like running, ab workouts, yoga, etc.)
	31	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.

Q24 Now thinking about your health overall... Do you currently keep track of your own weight, diet, or exercise routine, or is this not something you currently do?

	<u>CURRENT</u>	
%	60	Yes, keep track
	39	No, not something R currently does
	*	Don't know

* Refused

Q25 How about any other health indicators or symptoms? Do you happen to track your own blood pressure, blood sugar, sleep patterns, headaches, or any other indicator?

	<u>CURRENT</u>	
%	33	Yes
	67	No
	*	Don't know
	*	Refused

CARE10 Turning again to the UNPAID care you provide to family, friends or others... Do you happen to keep track of any health indicators or symptoms for any of the people you care for?

Based on all caregivers [N=1,171]

	<u>CURRENT</u>	
%	31	Yes
	69	No
	*	Don't know
	*	Refused

Q26 Thinking about the health indicator you pay the MOST attention to, either for yourself or someone else, how do you keep track of changes? Do you use... [READ 1-6]

Based on those who track a health indicator for themselves or others [N=2,183]

		current
%	34	Paper, like a notebook or journal
	5	A computer program, like a spreadsheet
	1	A website or other online tool
	7	An app or other tool on your phone or mobile device
	8	A medical device, like a glucose meter
	49	Or do you keep track just in your head?
	2	(VOL.) Other (SPECIFY)
	2	(VOL.) Don't know
	1	(VOL.) Refused

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

Q27 How often do you update your records or notes about this health indicator? Do you do this on a regular basis, or only when something comes up or changes?

Based on those who track a health indicator for themselves or others [N=2,183]

		CURRENT
%	46	Regular basis
	49	Only when something comes up or changes
	2	Don't know
	2	Refused

Q27a Do you update this information... [READ 1-6]

Based on those who track a health indicator for themselves or others on a regular basis [N=1,053]

current		
%	13	Several times a day
	23	About once a day
	15	3-5 days a week
	23	1-2 days a week
	16	Once or twice a month
	9	Less than once a month
	1	(VOL.) Don't know
	1	(VOL.) Refused

Q28 Do you share these health tracking records or notes with anyone, either online or offline?

Based on those who track a health indicator for themselves or others [N=2,183]

CURRENT		
%	34	Yes
	65	No
	*	Don't know
	*	Refused

Q29 Who do you share this information with? [PRECODED OPEN-END]

Based on those who share health tracking records or notes with others [N=761]

	<u>CURRENT</u>	
%	52	Health or medical professional (includes doctor, nurse, therapist, physician's assistant)
	22	Respondent's spouse/partner
	11	Other Family member/Family relationship
	8	Friend
	7	Respondent's parent
	7	Respondent's child
	5	Respondent's brother/sister/sibling
	1	Member of Group: Church, community association, volunteer group
	*	Personal trainer or health coach
	5	Other (SPECIFY)
	*	Don't know
	0	Refused

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

Q30 In which of the following ways, if any, has tracking this health indicator affected your own health care routine or the way you care for someone else? (First,) has it... [INSERT ITEM; RANDOMIZE]?

Based on those who track a health indicator for themselves or others [N=2,183]

	<u>YES</u>	<u>NO</u>	<u>DON'T KNOW</u>	<u>REFUSED</u>
a. Affected a decision about how to treat an illness or condition	34	64	2	1
b. Changed your overall approach to maintaining your health or the health of someone you help take care of	46	53	1	1
c. Led you to ask a doctor new questions, or to get a second opinion from another doctor	40	59	*	1

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 an 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

Strata	Population Dist'n	Sample 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:

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

LL_i =1 if respondent has a landline phone and =0 if respondent has no landline phone

- CP =1 if respondent has a cell phone and =0 if respondent has no cell phone
- S_{LL} the size of the landline sample
- S_{CP} the size of the cell sample
- 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 data⁷. 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.

⁷ 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>	<u>Unweighted</u>	<u>Weighted</u>
<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
<u>Education (changed)</u>			
Less than HS Graduate	13.3	9.0	11.7
HS Graduate	30.4	27.7	30.6
Some College/Assoc Degree	28.5	26.0	28.8
College Graduate	27.8	37.3	28.9
<u>Race/Ethnicity</u>			
White/not Hispanic	67.8	63.0	68.1
Black/not Hispanic	11.5	16.8	11.8
Hispanic - US born	6.6	7.6	6.6
Hispanic - born outside	7.4	6.8	7.0
Other/not Hispanic	6.7	5.7	6.5
<u>Region</u>			
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 Demographics (...continued)

<u>County Pop. Density</u>			
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

<u>Household Phone Use</u>			
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
CPO	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:

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

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 (\sqrt{deff}). Thus, the formula for computing the 95% confidence interval around a percentage is:

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

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 ± 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 Size	Design 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.⁸

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=$I/[I+R+NC+O+(e*UH/UO)]$

⁸ The sample disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.