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Tracking for Health

69% of U.S. adults track a health indicator like weight, diet, exercise routine, or symptom. Of those, half track “in their heads,” one-third keep notes on paper, and one in five use technology to keep tabs on their health status.

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<http://pewinternet.org/Reports/2013/Tracking-for-Health.aspx>

Summary of Findings

Seven in ten U.S. adults track a health indicator for themselves or for a loved one

Keeping notes on one's health has been shown to be a tool for improving it,¹ but up until now there has been no measure of how many people engage in this activity.

A national telephone survey conducted by the Pew Research Center's Internet & American Life Project finds that 69% of U.S. adults keep track of at least one health indicator such as weight, diet, exercise routine, or symptom.

Tracking Health Indicators

% of adults who track the following...

All adults (n=3,014)	%
Track weight, diet, or exercise routine	60
Track any other health indicators like blood pressure, sleep patterns, headaches, etc.	33
Track any health indicators for a loved one	12
Total who track any health indicator for themselves or others	69

Source: Pew Internet/CHCF 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 results based on all adults.

We will refer to this group as "trackers" throughout this report.

People living with chronic conditions are significantly more likely to track a health indicator or symptom

The Pew Internet survey shows that people living with one or more chronic conditions are no more likely than other U.S. adults to track their weight, diet, or exercise routine. They are, however, significantly more likely to track other health indicators or symptoms and this likelihood increases among those living with more than one condition:

- 19% of U.S. adults reporting no chronic conditions say they track health indicators or symptoms
- 40% of U.S. adults with 1 condition are trackers
- 62% of U.S. adults with 2+ conditions are trackers

Nearly half (45%) of U.S. adults are dealing with at least one chronic condition. Of those who are living with two or more conditions, 78% have high blood pressure and 45% have diabetes — two health conditions more effectively managed when people track their own data.²

¹ See, for example: "Premonitory symptoms in migraine: An electronic diary study," by N.J. Giffin, et al. *Neurology* March 25, 2003 vol. 60 no. 6 935-940. Available at: <http://www.neurology.org/content/60/6/935.abstract>

Tracking on paper, spreadsheet, mobile device — or just “in their heads”

Since some people track more than one aspect of their health we asked respondents to think about the health indicator they pay the most attention to, either for themselves or someone else, and to tell us how they track it:

- 49% of trackers say they keep track of progress “in their heads.”
- 34% say they track the data on paper, like in a notebook or journal.
- 21% say they use some form of technology to track their health data.

(Total may exceed 100% due to multiple responses.)

There were significant differences between the 50% of trackers who record their notes in some organized way, such as on paper or using technology, and the 44% of trackers who keep track solely “in their heads.” We will note the differences in each section that follows.

People with more serious health concerns take their tracking more seriously

Trackers living with multiple chronic conditions are more likely to be methodical about collecting their own health data:

- 45% of trackers with 2+ conditions use paper, like a notebook or journal, compared with 37% of trackers with 1 condition and 28% of trackers who report no chronic conditions.
- 22% of trackers with 2+ conditions say they use a medical device, like a glucometer, compared with 7% of trackers with 1 condition and 2% of trackers who report no chronic conditions.

At the same time, many trackers living with chronic conditions say they keep the data “in their heads.” Thirty-seven percent of trackers with 2+ conditions say they keep their progress notes “in their heads,” as do 48% of trackers with 1 condition and 54% of trackers who report no chronic conditions.

Half of all trackers update their records or notes only occasionally and most do not share the data with anyone else

Half of trackers (49%) say they update their records or notes only occasionally, when something comes up or changes; half (46%) say they update on a regular basis. Thirty-four percent of trackers say they share their records or notes with another person or group, either online or offline. Of those, half (52%) share with a clinician.

Not surprisingly, trackers who do not take formal notes are less likely than others to say they update their records on a regular basis or to share their progress with someone else.

² See, for example: “Type 1 diabetes: Treatments and drugs,” Mayo Clinic. Available at: <http://www.mayoclinic.com/health/type-1-diabetes/DS00329/DSECTION=treatments-and-drugs> or “High blood pressure (hypertension): Treatments and drugs,” Mayo Clinic. Available at: <http://www.mayoclinic.com/health/high-blood-pressure/DS00100/DSECTION=treatments-and-drugs>

Trackers with two or more conditions are more likely than other groups to say they keep track on a regular basis (rather than just when something comes up) and they are more likely to share their notes with someone else:

- 54% of trackers with 2+ conditions update their notes on a regular basis, compared with 46% of trackers with 1 condition and 43% of trackers who report no chronic conditions.
- 43% of trackers with 2+ conditions share their notes; of those, 71% share with a clinician
- By comparison, 35% of trackers with 1 condition share their notes; of those, 57% share with a clinician. Thirty percent of trackers who report no chronic conditions share their notes; of those, 37% share with a clinician.

Tracking can affect someone's overall approach to health

Why do people go to the trouble of tracking health data, for themselves or for someone they care for? Some say they get results:

- 46% of trackers say that this activity has changed their overall approach to maintaining their health or the health of someone for whom they provide care.
- 40% of trackers say it has led them to ask a doctor new questions or to get a second opinion from another doctor.
- 34% of trackers say it has affected a decision about how to treat an illness or condition.

In all, 63% of trackers agree with at least one of those statements of impact.

Tracking has had a more significant impact on people living with chronic conditions

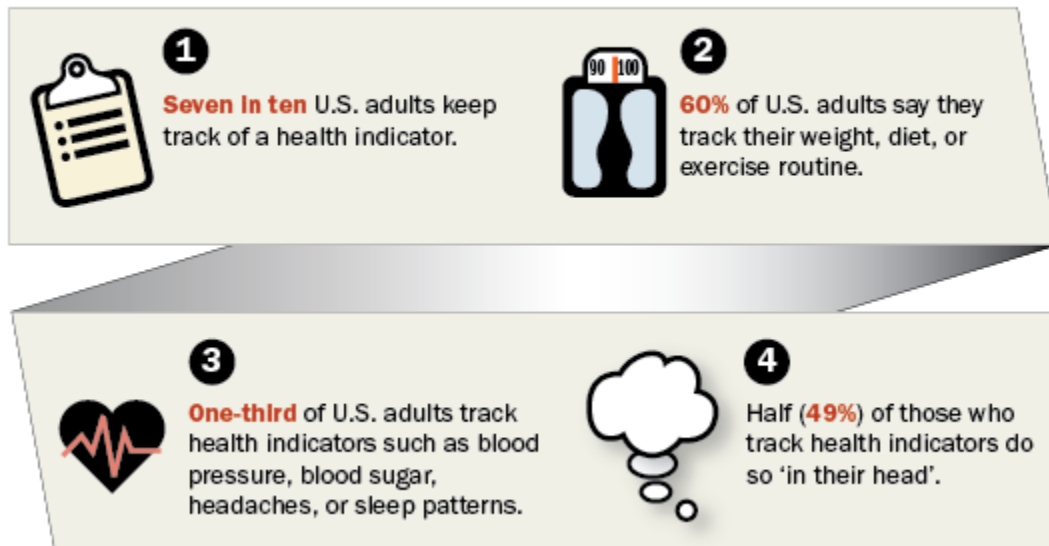
Trackers with chronic conditions are significantly more likely to report that these activities have had an impact on their health:

- 56% of trackers living with 2+ conditions say it has affected their overall approach to maintaining their health or the health of someone they help care for, compared with 40% of trackers who report no chronic conditions.
- 53% of trackers living with 2+ conditions say it has led them to ask a doctor new questions or to seek a second opinion, compared with 33% of trackers with no chronic conditions
- 45% of trackers living with 2+ conditions say it has affected a decision about how to treat an illness or condition, compared with 25% of trackers with no chronic conditions.

Three-quarters of trackers with 2+ conditions (76%) agree with at least one of those statements – only 24% say that tracking a health indicator hasn't affected their health in any of these ways. Fully 68% of trackers with 1 condition report at least one of the three impacts, compared with 55% of those who report no chronic conditions.

Caregivers and trackers who had experienced a recent, significant health change are also more likely than other groups to report an impact. Trackers who keep formal records, such as on paper or using technology, are also more likely than others to report an impact.

Self-tracking health data...



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 ± 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.

Main Report

Seven in ten U.S. adults track a health indicator for themselves or for a loved one

Two-thirds of U.S. adults are overweight or obese³ and nearly half are living with some other chronic condition such as hypertension, diabetes, heart conditions, lung conditions, and cancer. Self-monitoring has been shown to be an ingredient for improving health outcomes, particularly among people trying to control their weight,⁴ blood pressure, and blood sugar.⁵ The question that has remained unanswered up until now is: How many people are tracking their health on a regular basis?

In 2010, Pew Internet began to explore the phenomenon of tracking for health, limiting our questions to those who use online tools. We found that 15% of internet users tracked their weight, diet, or exercise routine online and 17% of internet users tracked any other health indicators or symptoms online. Fully 27% of adult internet users said yes to either question, which translates to about one in five U.S. adults who use some form of technology to track a health indicator.

In this study, based on a national telephone survey fielded in August-September 2012, Pew Internet widened the scope of the questions to include all adults and all forms of tracking, not just online.

Fully 60% of U.S. adults say they track their weight, diet, or exercise routine. One-third of U.S. adults track health indicators or symptoms, like blood pressure, blood sugar, headaches, or sleep patterns. One-third of caregivers — people caring for a loved one, usually an adult family member — say they track a health indicator for their loved one. When looking at this last group as a segment of the total population, 12% of U.S. adults track a health indicator on behalf of someone they care for.

Added together, seven in ten U.S. adults say they track at least one health indicator. We will refer to this group as “trackers” throughout this report.

³ FastStats: Obesity and Overweight. Centers for Disease Control. Available at: <http://www.cdc.gov/nchs/fastats/overwt.htm>

⁴ “Integrating Technology Into Standard Weight Loss Treatment: A Randomized Controlled Trial,” by B. Spring, et al. JAMA Internal Medicine 2012;():1-7. doi:10.1001/jamainternmed.2013.1221. Available at: <http://archinte.jamanetwork.com/article.aspx?articleid=1485082>

⁵ See, for example: “Type 1 diabetes: Treatments and drugs,” Mayo Clinic. Available at: <http://www.mayoclinic.com/health/type-1-diabetes/DS00329/DSECTION=treatments-and-drugs> or “High blood pressure (hypertension) Treatments and drugs,” Mayo Clinic. Available at: <http://www.mayoclinic.com/health/high-blood-pressure/DS00100/DSECTION=treatments-and-drugs>

Tracking Health Indicators

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Weight, diet, or exercise routine are the most commonly tracked health indicators

Sixty percent of U.S. adults say they track their weight, diet, or exercise routine.

In the general population, women and men are equally likely to report tracking their weight, diet, or exercise routine. Non-Hispanic whites and African Americans are more likely than Latinos to track these basic health indicators: 62%, 59%, and 51% of each group respectively do so. Older adults are more likely than younger ones to track their weight, diet, or exercise routine: 71% of those ages 65 and older do so, compared with 61% of 18-29 year-olds, for example. Sixty-eight percent of college graduates track their weight, diet, or exercise routine, compared with 54% of adults with a high school diploma and 43% of those who have not graduated from high school.

One in three adults track health indicators or symptoms

Thirty-three percent of U.S. adults track health indicators or symptoms, like blood pressure, blood sugar, headaches, or sleep patterns.

Women and men are equally likely to track health indicators and symptoms. African Americans are more likely than non-Hispanic whites or Latinos to do so: 41% report tracking health indicators, compared with 33% of white adults and 25% of Latinos. Fully 52% of adults ages 65 and older track a health indicator, compared with just 20% of those between the ages of 18-29 years old. There are no differences among adults with various levels of education.

One in three caregivers track health indicators or symptoms for their loved one

Twelve percent of U.S. adults track health indicators or symptoms for a loved one.

To establish whether someone is a caregiver, we asked a series of questions about whether, in the past 12 months, they provided unpaid care to a relative or friend. Fully 36% of U.S. adults say they did so, which could include helping an adult relative or friend with personal needs, household chores, finances, or simply visiting to check in. Two-thirds of this group cares for one adult and one-third care for multiple

adults. Eight percent of U.S. adults care for a child with a medical, behavioral, or other condition or disability. In sum, 39% of U.S. adults are caregivers.⁶

Caregiving is an activity that cuts across most demographic groups. Women and men are equally likely to report caring for a loved one, as are people of different educational and economic backgrounds. Adults ages 30-64 years old are the most likely age group to report being a caregiver: 44% say yes, they care for an adult or child, compared with 42% of adults ages 30-49, 36% of adults ages 18-29, and 30% of those age 65 and older.

Thirty-one percent of caregivers keep track of health indicators or symptoms for any of the people they care for. Female caregivers are more likely than their male counterparts to track a health indicator on behalf of their loved one: 35% vs. 26%.

Caregivers are also likely to track their own health: 64% of caregivers track their own weight, diet, or exercise routine and 39% track their own health indicators or symptoms, like blood pressure, blood sugar, headaches, or sleep patterns.

People living with chronic conditions are significantly more likely to track a health indicator or symptom

Some interesting patterns emerge when looking at people living with chronic conditions, who could arguably benefit the most from keeping track of their health in an organized way.

In order to segment this group, we asked a series of questions to determine if a respondent is living with any of the following health problems or conditions and found that:

- 25% of U.S. adults are living with high blood pressure
- 13% are living with asthma, bronchitis, emphysema, or other lung condition
- 11% are living with diabetes
- 7% are living with heart disease, heart failure, or heart attack
- 3% are living with cancer
- 16% are living with another chronic condition

Fully 45% of U.S. adults are dealing with at least one chronic condition. Of those who are living with two or more conditions, 78% have high blood pressure and 45% have diabetes – two health conditions more effectively managed when people track their own data.⁷

As it turns out, people living with one or more chronic conditions are no more likely than other U.S. adults to track their weight, diet, or exercise routine. But they are significantly more likely to track other health indicators or symptoms and this likelihood increases among those living with more than one condition:

⁶ The Pew Internet Project will release a separate report about caregivers in spring 2013.

⁷ See, for example: "Type 1 diabetes: Treatments and drugs," Mayo Clinic. Available at: <http://www.mayoclinic.com/health/type-1-diabetes/DS00329/DSECTION=treatments-and-drugs> or "High blood pressure (hypertension) : Treatments and drugs," Mayo Clinic. Available at: <http://www.mayoclinic.com/health/high-blood-pressure/DS00100/DSECTION=treatments-and-drugs>

- 19% of U.S. adults reporting no chronic conditions say they track health indicators or symptoms
- 40% of U.S. adults with 1 condition track
- 62% of U.S. adults with 2+ conditions track

One in five adults experienced a significant change in their physical health in the past year — and they are more likely to track

In addition to asking people about negative effects on their health, such as chronic conditions, we included a question about other significant health changes: gaining or losing a lot of weight, becoming pregnant, or quitting smoking. One in five U.S. adults (18%) says they experienced at least one of these changes in the past year.

These adults are no more likely than other people to track their weight, diet, or exercise routine: 63% do so. But adults who have gone through a significant health change in the past year are more likely than other people to track another health indicator or symptom: 41% vs. 31%.

Tracking on paper, spreadsheet, mobile device — or just “in their heads”

One limitation of the Pew Internet Project’s 2010 study on health tracking was our focus on technology. This time we set the internet’s impact on health in context, asking people a wider range of questions about how — and how often — they track their weight, diet, exercise routine, or other health indicators.

When asked to think about the health indicator they pay the most attention to, either for themselves or someone else, fully half of trackers in the general population (49%) say they do so “in their heads.” Men are more likely than women to keep track in their heads (54% vs. 44%) as are younger adults (55% of 18-29 year-old trackers, compared with 44% of those age 65 and older, for example).

This makes some sense since all someone might need to track their weight is a scale — or even a pair of jeans that only fit if someone is at their target weight. This finding is, however, a challenge to technology developers who would like to convince people to upgrade their habits. In order to capture this segment of the market they must strive to create a tool that is as seamless as keeping track in your head.

Another 34% of trackers in the general population say they track the data on paper, like in a notebook or journal. Women are more likely than men to track health data using pencil and paper (40% vs. 28%) as are older adults (41% of those ages 65 and older, compared with 28% of those 18-29 years old).

One in five trackers in the general population (21%) say they use some form of technology to track their health data, which matches our 2010 finding. Specifically:

- 8% of trackers use a medical device, like a glucose meter
- 7% use an app or other tool on their mobile phone or device
- 5% use a spreadsheet
- 1% use a website or other online tool

Sixteen percent of 18-29 year-old trackers use an app or other tool on a mobile phone or device, compared with 9% of 30-49 year-olds, 3% of 50-64 year-olds, and 1% of trackers ages 65 and older.

Trackers ages 50 and older are the most likely age groups to use a medical device. Fourteen percent of

50-64 year-olds and 12% of trackers ages 65 and older do so, compared with 5% of trackers ages 30-49 and 1% of 18-29 year-olds.

Respondents were allowed to give multiple responses, so there is some overlap among groups. But there were significant differences between the 50% of trackers who record their notes in some organized way, such as on paper or using technology, and the 44% of trackers who keep track solely “in their heads.” We will note the differences in each section that follows.

People with more serious health concerns take their tracking more seriously

It is worth noting that although we asked peer researchers and expert patients to review our questions in advance of fielding them for the first time, it was a respondent who provided the most important feedback on the question related to how people track their health indicators and symptoms.

Our polling questioners happened to reach someone living with diabetes on the first night of interviews. As she listened to her options, the respondent politely replied that we were not offering her an opportunity to describe her use of a glucometer to track her blood sugar. The interviewer noted her response and we were able to add “medical device” as one of the options for the remainder of the survey’s field dates.

Indeed, it seems that that many trackers living with multiple conditions are more likely to be methodical about collecting their own health data:

- 45% of trackers with 2+ conditions use paper, like a notebook or journal, compared with 37% of trackers with 1 condition and 28% of trackers who report no chronic conditions.
- 22% of trackers with 2+ conditions say they use a medical device, like a glucometer, compared with 7% of trackers with 1 condition and 2% of trackers who report no chronic conditions.

At the same time, a notable number of trackers with chronic conditions say they do not keep formal records. Thirty-seven percent of trackers with 2+ conditions say they keep their progress notes “in their heads,” as do 48% of trackers with 1 condition and 54% of trackers who report no chronic conditions.

Only small groups of trackers living with chronic conditions use any other technology:

- 3% of trackers living with 2+ conditions use a computer program, like a spreadsheet – statistically the same percentage as other trackers.
- 1% of trackers living with 2+ conditions use a website or other online tool – again, about the same as other groups.
- 3% of trackers living with 2+ conditions use an app or other tool on their phone or mobile device.

That last option is significantly more popular among trackers reporting no chronic conditions, 10% of whom say they use an app to track their health.

One in five smartphone owners has a health app

To further explore the possibility of incorporating apps into a health regimen, we asked a separate question and found that 19% of smartphone owners have downloaded an app specifically to track or manage health. As we reported in “Mobile Health 2012,”⁸ women, those under age 50, those who are better educated, and those with an annual household income over \$75,000 are more likely to have downloaded a health app.

Who Uses Health Apps?

% of smartphone owners within each group who have software applications on their phone to track or manage health

All smartphone owners (n=1,262)		19%
a	Men (n=602)	16
b	Women (n=660)	23 ^a
Age		
a	18-29 (n=332)	24 ^{cd}
b	30-49 (n=516)	19 ^d
c	50-64 (n=293)	16
d	65+ (n=105)	10
Race/ethnicity		
a	White, Non-Hispanic (n=712)	19
b	Black, Non-Hispanic (n=211)	21
c	Hispanic (n=203)	15
Annual household income		
a	Less than \$30,000/yr (n=268)	14
b	\$30,000-\$49,999 (n=193)	21
c	\$50,000-\$74,999 (n=198)	21
d	\$75,000+ (n=443)	23 ^a
Education level		
a	High school grad (n=288)	11
b	Some College (n=326)	24 ^a
c	College + (n=597)	22 ^a

Source: Pew Internet/CHCF 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 +/- 3.2 percentage points for results based on smartphone owners.

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.

⁸ “Mobile Health 2012” (Pew Internet: Nov. 8, 2012). Available at: <http://www.pewinternet.org/Reports/2012/Mobile-Health.aspx>

Exercise, diet, and weight apps most popular

Exercise, diet, and weight apps are the most popular types of health apps downloaded. Some 38% of health app users track their exercise, 31% monitor their diet, and 12% use an app to manage their weight. Other health apps mentioned by respondents track menstrual cycles, blood pressure, pregnancy, blood sugar or diabetes, and medication.

Types of Health Apps

% of health app users who use apps to track...

All health app users (n=254)	
Exercise, fitness, pedometer or heart rate monitoring	38%
Diet, food, calorie counter	31
Weight	12
Period or menstrual cycle	7
Blood pressure	5
WebMD	4
Pregnancy	3
Blood sugar or diabetes	2
Medication management (tracking, alerts, etc)	2
Mood	-
Sleep	-
Other	14

Source: Pew Internet/CHCF 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 +/- 7 percentage points for results based on health app users.

*Less than 1% of respondents

Most trackers update their records only occasionally

Digging deeper into tracking in general, we asked respondents to think about the health indicator they pay the most attention to, either for themselves or someone else, and then tell us how often they update their records, whether on a regular basis, or only when something comes up or changes.

Half of trackers (49%) say they update their records only occasionally, when something comes up or changes; half (46%) say they update on a regular basis. Older trackers (age 50+) are more likely than younger ones to track on a regular basis.

Of those who update their records regularly:

- 13% say they update several times per day
- 23% update about once per day
- 15% update 3-5 days per week
- 23% update 1-2 days per week
- 16% update once or twice per month
- 9% update less than once per month

- 2% weren't sure

Sixty percent of trackers who keep formal records, such as on paper or some form of technology, say they update their notes on a regular basis, compared with 33% of those who only track “in their heads.”

One in three trackers share their notes with someone else

One-third of trackers (34%) say they share their health tracking records or notes with another person or group, either online or offline. Women are more likely than men to share their data (39% vs. 29%) as are older trackers (39% of those ages 65+ vs. 31% of 18-29 year olds).

Of trackers who share their notes:

- 52% share with a health or medical professional
- 22% share with a spouse/partner
- 11% share with another family member
- 8% share with a friend
- 7% share with their parent
- 7% share with their child
- 5% share with their sibling
- 1% share with members of a group, such as a church, community association, volunteer group, etc.
- 5% share with someone else, not included in the above descriptions

Forty-four percent of trackers who use paper and pencil or some form of technology say they share their notes, compared with 24% of those who only track “in their heads.”

People living with chronic conditions are likely to update their data regularly and to share their notes with a clinician

Trackers with two or more conditions are more likely than other groups to say they keep track on a regular basis (rather than just when something comes up) and they are more likely to share their notes with someone else:

- 54% of trackers with 2+ conditions update their notes on a regular basis, compared with 46% of trackers with 1 condition and 43% of trackers who report no chronic conditions.
- 43% of trackers with 2+ conditions share their notes; of those, 71% share with a clinician
- By comparison, 35% of trackers with 1 condition share their notes; of those, 57% share with a clinician. Just 30% trackers who report no chronic conditions share their notes; of those, 37% share with a clinician.

Caregivers are no more likely than other trackers to update their notes regularly, but they are more likely to share

Caregivers who keep track of a health indicator are no more likely than other trackers to say they update their notes on a regular basis. However, 41% of trackers caring for a loved one say they share their

tracking data with someone else, compared with 29% of non-caregivers who track. Caregivers who share progress notes are likely to do so with a clinician rather than a family member, which follows the pattern of non-caregivers as well.

Tracking can affect one's overall approach to health

Why do people go to the trouble of tracking health data, for themselves or for someone they care for? Some say they get results.

Forty-six percent of trackers say that this activity has changed their overall approach to maintaining their health or the health of someone for whom they provide care. In the general population, women are more likely than men to report this effect (49% vs. 42%) as are trackers ages 30-49: 51% of that age group report that tracking has changed their overall approach to health, compared with 42% of trackers ages 18-29, for example.

Forty percent of trackers say it has led them to ask a doctor new questions or to get a second opinion from another doctor. Women are more likely than men to report this effect, as well (43% vs. 37%).

Thirty-four percent of trackers say it has affected a decision about how to treat an illness or condition. There were no notable differences among demographic groups in the general population.

In all, 63% of trackers agree with at least one of those statements of impact.

Trackers who maintain formal notes report a greater impact than those who do not

Trackers who use paper and pencil or some form of technology are more likely than the informal, “in their heads” trackers to report an impact:

- 54% of trackers who record their notes say it has changed their overall approach to health, compared with 39% of trackers who do not take formal notes.
- 48% of trackers who record their notes say it has led them to ask a doctor new questions, compared with 33% of trackers who do not take notes
- 42% of trackers who record their notes say it has affected a health decision, compared with 26% of trackers who do not take notes.

Tracking has had a more significant impact on people living with chronic conditions

Trackers with chronic conditions are significantly more likely to report that these activities have had an impact on their health:

- 56% of trackers living with 2+ conditions say it has affected their overall approach to maintaining their health or the health of someone they help care for, compared with 40% of trackers who report no chronic conditions.

- 53% of trackers living with 2+ conditions say it has led them to ask a doctor new questions or to seek a second opinion, compared with 33% of trackers with no chronic conditions
- 45% of trackers living with 2+ conditions say it has affected a decision about how to treat an illness or condition, compared with 25% of trackers with no chronic conditions.

Three-quarters of trackers with 2+ conditions (76%) agree with at least one of those statements – only 24% say that tracking a health indicator hasn't affected their health in any of these ways. Fully 68% of trackers with 1 condition report at least one of the three impacts, compared with 55% of those who report no chronic conditions.

Caregivers are also likely to report tracking's impact

Among trackers, people actively caring for a loved one are more likely than others to say this activity has affected them:

- 52% of caregivers who track say it has affected their overall approach to maintaining their health or the health of someone they help care for, compared with 41% of non-caregiver trackers.
- 50% of caregivers who track say it has led them to ask a doctor new questions or to seek a second opinion, compared with 32% of non-caregiver trackers.
- 44% of caregivers who track say it has affected a decision about how to treat an illness or condition, compared with 26% of non-caregiver trackers.

Seven in ten caregivers who track (72%) agree with at least one of the three statements about the impact of health data tracking, compared with 56% of trackers who are not currently caring for a loved one.

Trackers who experienced a recent significant health change are likely report that tracking has had an impact

Three quarters of trackers who experienced a recent significant health change say that tracking has had an impact in one of the three ways we inquired about in the survey. Taken by turns:

- 58% of trackers who experienced a recent health change say tracking has affected their overall approach to maintaining their health or the health of someone they help care for, compared with 43% of trackers who do not report a recent significant health change.
- 54% of trackers who experienced a health change say tracking has led them to ask a doctor new questions or to seek a second opinion, compared with 37% of other trackers.
- 44% of trackers who experienced a health change say tracking has affected a decision about how to treat an illness or condition, compared with 31% of other trackers.

Appendix

Track Weight, Diet, or Exercise

Among all American adults age 18+, the % who keep track of their weight, diet, or exercise

		% who track weight, diet, or exercise
All adults ages 18+ (n=3,014)		60%
a	Men (n=1,337)	58
b	Women (n=1,677)	62
Race/ethnicity		
a	White, Non-Hispanic (n=1,864)	62 ^c
b	Black, Non-Hispanic (n=497)	59 ^c
c	Hispanic (n=427)	51
Age		
a	18-29 (n=478)	61
b	30-49 (n=833)	56
c	50-64 (n=814)	59
d	65+ (n=830)	71 ^{abc}
Education attainment		
a	No high school diploma (n=269)	43
b	High school grad (n=830)	54 ^a
c	Some College (n=778)	67 ^{ab}
d	College + (n=1,115)	68 ^{ab}
Household income		
a	Less than \$30,000/yr (n=876)	53
b	\$30,000-\$49,999 (n=523)	64 ^a
c	\$50,000-\$74,999 (n=371)	68 ^a
d	\$75,000+ (n=680)	66 ^a
Parent of minor		
a	Parent (n=785)	56
b	Non-parent (n=2,223)	63 ^a
Urbanity		
a	Urban (n=1,095)	61
b	Suburban (n=1,406)	63
c	Rural (n=396)	57

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on all adults.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Track Health Indicators or Symptoms

Among all American adults age 18+, the % who keep track of any other health indicators or symptoms, such as blood pressure, blood sugar, sleep patterns, headaches, etc

		% who track other health indicators or symptoms
All adults ages 18+ (n=3,014)		33%
a	Men (n=1,337)	33
b	Women (n=1,677)	33
Race/ethnicity		
a	White, Non-Hispanic (n=1,864)	33 ^c
b	Black, Non-Hispanic (n=497)	41 ^{ac}
c	Hispanic (n=427)	25
Age		
a	18-29 (n=478)	20
b	30-49 (n=833)	26
c	50-64 (n=814)	40 ^{ab}
d	65+ (n=830)	52 ^{abc}
Education attainment		
a	No high school diploma (n=269)	37
b	High school grad (n=830)	32
c	Some College (n=778)	35
d	College + (n=1,115)	31
Household income		
a	Less than \$30,000/yr (n=876)	33
b	\$30,000-\$49,999 (n=523)	38 ^d
c	\$50,000-\$74,999 (n=371)	31
d	\$75,000+ (n=680)	28
Parent of minor		
a	Parent (n=785)	26
b	Non-parent (n=2,223)	36 ^a
Urbanity		
a	Urban (n=1,095)	32
b	Suburban (n=1,406)	33
c	Rural (n=396)	38

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on all adults

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Track for Others

Among caregivers, the % who keep track of any health indicators or symptoms for anybody under their care

		% who track
All caregivers ages 18+ (n=1,171)		31%
a	Men (n=499)	26
b	Women (n=672)	35 ^a
Race/ethnicity		
a	White, Non-Hispanic (n=730)	29
b	Black, Non-Hispanic (n=201)	38
c	Hispanic (n=148)	29
Age		
a	18-29 (n=166)	29
b	30-49 (n=360)	34 ^d
c	50-64 (n=360)	31
d	65+ (n=262)	23
Education attainment		
a	No high school diploma (n=79)	25
b	High school grad (n=295)	36
c	Some College (n=326)	29
d	College + (n=467)	29
Household income		
a	Less than \$30,000/yr (n=302)	33 ^d
b	\$30,000-\$49,999 (n=225)	33 ^d
c	\$50,000-\$74,999 (n=174)	40 ^d
d	\$75,000+ (n=284)	23
Parent of minor		
a	Parent (n=371)	35
b	Non-parent (n=797)	28
Urbanity		
a	Urban (n=411)	31
b	Suburban (n=550)	31
c	Rural (n=171)	31

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 4 percentage points for results based on caregivers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Track for Self or Others

Among all American adults age 18+, the % who keep track of any health indicators or symptoms for themselves or others

		% who track for themselves or others
All adults ages 18+ (n=3,014)		69%
a	Men (n=1,337)	65
b	Women (n=1,677)	72 ^a
Race/ethnicity		
a	White, Non-Hispanic (n=1,864)	70 ^c
b	Black, Non-Hispanic (n=497)	72 ^c
c	Hispanic (n=427)	58
Age		
a	18-29 (n=478)	65
b	30-49 (n=833)	64
c	50-64 (n=814)	70 ^b
d	65+ (n=830)	81 ^{abc}
Education attainment		
a	No high school diploma (n=269)	57
b	High school grad (n=830)	64
c	Some College (n=778)	74 ^{ab}
d	College + (n=1,115)	73 ^{ab}
Household income		
a	Less than \$30,000/yr (n=876)	64
b	\$30,000-\$49,999 (n=523)	72 ^a
c	\$50,000-\$74,999 (n=371)	74 ^a
d	\$75,000+ (n=680)	73 ^a
Parent of minor		
a	Parent (n=785)	63
b	Non-parent (n=2,223)	71 ^a
Urbanity		
a	Urban (n=1,095)	69
b	Suburban (n=1,406)	71
c	Rural (n=396)	67

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on all adults.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Tracking Tools

Among those who track health indicators for themselves or others, the % who keep track in the following ways

		Paper	Computer Program, e.g. Spreadsheet	Website or other online tool	App or mobile tool	Medical device	Keep track in head
All trackers (n=2,183)		34%	5%	1%	7%	8%	49%
a	Men (n=926)	28	6 ^b	1	8	7	54 ^b
b	Women (n=1,257)	40 ^a	4	2	6	8	44
Race/ethnicity							
a	White (n=1,286)	35	5	1	7	8	50
b	Black (n=372)	40	3	2	8	9	45
c	Hispanic (n=271)	33	4	1	8	6	43
Age							
a	18-29 (n=323)	28	6 ^d	1	16b ^{cd}	1	55 ^{cd}
b	30-49 (n=547)	33	6 ^d	3 ^{cd}	9 ^{cd}	5 ^a	51 ^d
c	50-64 (n=604)	36 ^a	5 ^d	1	3 ^d	14 ^{ab}	45
d	65+ (n=670)	41 ^{ab}	2	-	1	12 ^{ab}	44
Education attainment							
a	< High school (n=160)	31	1	1	1	13 ^d	51
b	High school grad (n=575)	37	3	1	4 ^a	9	49
c	Some College (n=592)	36	4 ^a	2	10 ^{ab}	7	49
d	College + (n=842)	32	9 ^{abc}	2 ^b	9 ^{ab}	6	48
Household income							
a	< \$30,000/yr (n=599)	35	3	1	4	10 ^{cd}	48
b	\$30,000-\$49,999 (n=402)	39 ^d	4	1	9	10 ^c	48
c	\$50,000-\$74,999 (n=287)	37 ^d	9 ^{ab}	2	8	4	44
d	\$75,000+ (n=509)	28	7 ^a	2	10 ^a	5	54 ^c
Parent of minor							
a	Parent (n=514)	33	8 ^b	3b	10 ^b	5	48
b	Non-parent (n=1,668)	35	4	1	6	9 ^a	49
Urbanity							
a	Urban (n=795)	34	5	2	8	8	48
b	Suburban (n=1,038)	36	5	2 ^c	7	7	48
c	Rural (n=287)	33	3	-	5	10	49

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on trackers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age). Those who responded that they use another method are not included – about 2% of trackers.

Impact of Health Tracking, for Self or Others

Among trackers, the % who say tracking has affected their healthcare routine or the way they care for someone else in the following ways

		Changed overall approach to health	Asked doctor new questions or sought second opinion	Affected treatment decision	No effect
All trackers (n=2,183)		46%	40%	34%	37%
a	Men (n=926)	42	37	31	40 ^b
b	Women (n=1,257)	49 ^a	43 ^a	36	34
Race/ethnicity					
a	White, Non-Hispanic (n=1,386)	45	40	32	36
b	Black, Non-Hispanic (n=372)	46	44	37	38
c	Hispanic (n=271)	45	39	35	40
Age					
a	18-29 (n=323)	42	35	27	44 ^c
b	30-49 (n=547)	51 ^{ad}	39	34	35
c	50-64 (n=604)	47 ^d	43 ^a	38 ^a	31
d	65+ (n=670)	40	43 ^a	34	38
Education attainment					
a	No high school diploma (n=160)	50	49 ^d	29	33
b	High school grad (n=575)	41	41	34	40
c	Some College (n=592)	48 ^b	39	34	36
d	College + (n=842)	47	38	35	35
Household income					
a	Less than \$30,000/yr (n=599)	45	41	31	38
b	\$30,000-\$49,999 (n=402)	53 ^{ad}	44	40 ^a	31
c	\$50,000-\$74,999 (n=287)	47	45 ^d	41 ^{ad}	35
d	\$75,000+ (n=509)	45	36	32	38
Parent of minor					
a	Parent (n=514)	49	40	35	37
b	Non-parent (n=1,668)	44	40	33	37
Urbanity					
a	Urban (n=795)	45	42	35	36
b	Suburban (n=1,038)	46	40	33	36
c	Rural (n=287)	47	40	34	34

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on trackers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Frequency of Regular Health Tracking

Among those who track a health indicator on a regular basis, the % who do so with the following frequencies

		Several times a day	About once a day	3-5 days a week	1-2 days a week	Once or twice a month	Less than once a month
All regular trackers (n=1,053)		13%	23%	15%	23%	16%	9
a	Men (n=439)	10	23	15	25	16	10
b	Women (n=614)	15 ^a	23	15	22	15	8
Race/ethnicity							
a	White, Non-Hispanic (n=683)	12	25 ^b	14	24	14	10
b	Black, Non-Hispanic (n=191)	16	16	13	24	21	8
c	Hispanic (n=102)	8	23	18	22	23	4
Age							
a	18-29 (n=117)	6	24	20	25	18	7
b	30-49 (n=242)	16 ^a	16	15	29 ^d	13	9
c	50-64 (n=327)	12	24	15	21	18	10
d	65+ (n=346)	15 ^a	29 ^b	11	17	15	9
Education attainment							
a	< HS/HS grad (n=316)	15	20	17	20	17	8
b	Some College (n=292)	12	26	13	25	16	6
c	College + (n=436)	11	23	15	24	15	12
Household income							
a	Less than \$30,000/yr (n=277)	17 ^b	25	14	20	14	7
b	\$30,000-\$49,999 (n=196)	9	16	18	24	23	9
c	\$50,000-\$74,999 (n=143)	10	26	15	24	15	10
d	\$75,000+ (n=244)	11	20	16	26	13	12
Parent of minor							
a	Parent (n=256)	14	21	14	27	17	6
b	Non-parent (n=796)	12	24	15	21	15	10
Urbanity							
a	Urban (n=411)	11	23	15	23	15	11
b	Suburban (n=483)	14	22	13	24	17	7
c	Rural (n=130)	13	23	24 ^b	20	10	8

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 3.5 percentage points for results based on regular trackers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

Sharing Tracking Records

Among those who track a health indicator for themselves or others, the % who share their records with anyone

		% who share their tracking records
All trackers (n=2,183)		34%
a	Men (n=926)	29
b	Women (n=1,257)	39 ^a
Race/ethnicity		
a	White, Non-Hispanic (n=1,286)	36 ^c
b	Black, Non-Hispanic (n=372)	31
c	Hispanic (n=271)	29
Age		
a	18-29 (n=323)	31
b	30-49 (n=547)	36
c	50-64 (n=604)	31
d	65+ (n=670)	39 ^{a,c}
Education attainment		
a	No high school diploma (n=160)	31
b	High school grad (n=575)	33
c	Some college (n=592)	36
d	College + (n=842)	35
Household income		
a	Less than \$30,000/yr (n=599)	36
b	\$30,000-\$49,999 (n=402)	35
c	\$50,000-\$74,999 (n=287)	38
d	\$75,000+ (n=509)	31
Parent of minor		
a	Parent (n=514)	34
b	Non-parent (n=1,668)	34
Urbanity		
a	Urban (n=795)	35
b	Suburban (n=1,038)	35
c	Rural (n=287)	32

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 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 results based on trackers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

With Whom Do People Share Health Tracking Data?

Among those who track a health indicator and share their records, the % who share with the following people

		Health professional	Spouse/ Partner	Other Family Member	Friend	Parent	Child	Sibling
All sharing trackers (n=761)		52%	22%	11%	8%	7%	7%	5%
a	Men (n=289)	45	30 ^b	9	9	10	3	4
b	Women (n=472)	57 ^a	16	12	8	6	9 ^a	5
Race/ethnicity								
a	White (n=514)	54 ^c	23	12	8	6	7	3
b	Black (n=114)	52	20	8	5	12	4	4
c	Hispanic (n=86)	37	15	10	17 ^b	9	14	13
Age								
a	18-29 (n=96)	29	21	14	22 ^{bcd}	18 ^{cd}	1	6
b	30-49 (n=208)	52 ^a	20	12	7	9 ^{cd}	5	5
c	50-64 (n=191)	63 ^a	21	12	4	3	8 ^a	4
d	65+ (n=257)	58 ^a	26	6	5	-	15 ^{ab}	4
Education attainment								
a	< HS/HS grad (n=243)	47	23	9	7	10	10	8
b	Some college (n=215)	57	18	11	8	7	6	2
c	College + (n=301)	54	23	14	9	5	4	3
Household income								
a	<\$30,000/yr (n=212)	49	18	9	11	8	8	6 ^d
b	\$30,000-\$49,999 (n=149)	55	21	13	8	4	10 ^{cd}	6
c	\$50,000-\$74,999 (n=108)	43	31 ^a	15	9	13 ^b	2	6
d	\$75,000+ (n=162)	60 ^c	21	12	7	7	2	1
Parent of minor								
a	Parent (n=185)	48	25	13	10	7	4	4
b	Non-parent (n=576)	54	20	10	8	7	8	5
Urbanity								
a	Urban (n=288)	54	24	12	8	11 ^b	4	5
b	Suburban (n=360)	51	21	10	9	6	8	4
c	Rural (n=96)	50	21	15	9	7	8	5

Source: Pew Research Center's Internet & American Life Project/CHCF Health Survey, August 07 – September 06, 2012. N=3,014 adults ages 18+. Interviews were conducted in English and Spanish and on landline and cell phones. Margin of error is +/- 3.5 percentage points for results based on regular trackers.

Note: Percentages marked with a superscript letter (e.g., ^a) indicate a statistically significant difference between that row and the row designated by that superscript letter, among categories of each demographic characteristic (e.g. age).

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 ⁹	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

⁹ 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?¹⁰

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	*	*	--	--

¹⁰ 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 ¹¹				
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 ¹²				
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

¹¹ 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?"

¹² 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?¹³

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?¹⁴

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

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

¹⁴ 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]

	<u>CURRENT</u>	
%	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 data¹⁵. 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.

¹⁵ 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.¹⁶

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

¹⁶ The sample disposition codes and reporting are consistent with the American Association for Public Opinion Research standards.