



2018 CONSUMER SURVEY ON DIGITAL HEALTH

US RESULTS



SURVEY METHODOLOGY

SUMMARY

1. SURVEY METHODOLOGY

All respondents filled out a 15–20-minute online questionnaire

2. SAMPLE SIZE

2,301 US residents over the age of 18

3. US REGIONAL BREAKDOWN

EAST: 21.2% **WEST:** 23.4% **MIDWEST:** 21.3% **SOUTH:** 34.1%

4. WEIGHTING

We applied quotas on age within gender. The data was also weighted by region, education level, income, and ethnicity. This was done to match the weighting profile applied to the 2016 edition of this research series, and thereby ensures that valid comparisons can be made between the surveys.

Note that we have also included two questions here from the 2017 Virtual Health Survey, but the weighting is based on a different profile from the Digital Health Survey, so we advise caution regarding comparisons.

OVERVIEW

Accenture commissioned a seven-country survey of 7,905 consumers aged 18+ to assess their attitudes toward healthcare technology, modernization and service innovation.

The online survey included consumers across seven countries: Australia (1,031), England (1,043), Finland (848), Norway (768), Singapore (957), Spain (957), and the United States (2,301).

The survey was conducted by Longitude on behalf of Accenture between October 2017 and January 2018.

Where relevant, the survey uses select findings from the [Accenture 2016 Consumer Survey on Patient Engagement](#) and the [Accenture 2017 Consumer Survey on Virtual Health](#).

DEMOGRAPHICS

THE SURVEY IN THE US

GENDER AND AGE

Male	48%
Female	52%
Age (mean)	46.9

EDUCATION

Less than/completed some high school	7%
Completed high school	35%
Job-specific training program(s) after high school	3%
Some college, but no degree	16%
Associate degree	9%
College (e.g. BA and BS)	16%
Some graduate school, but no degree	3%
Graduate degree (e.g. MBA, MS, MD and PhD)	10%

INCOME

\$0 to \$24,999	17%
\$25,000 to \$49,999	22%
\$50,000 to \$74,999	18%
\$75,000 to \$99,999	13%
\$100,000 to \$124,999	10%
\$125,000 to \$149,999	7%
\$150,000+	10%
Declined to answer	4%

RACE/ETHNICITY

White	66%
Black	12%
African American	3%
Asian or Pacific Islander	2%
Native American or Alaskan Native	1%
Hispanic, Latin American, Mexican, Puerto Rican, Cuban, etc.	15%
Mixed race	2%

HEALTH STATUS

Has a chronic condition	66.5%
Does not have a chronic condition	33.5%

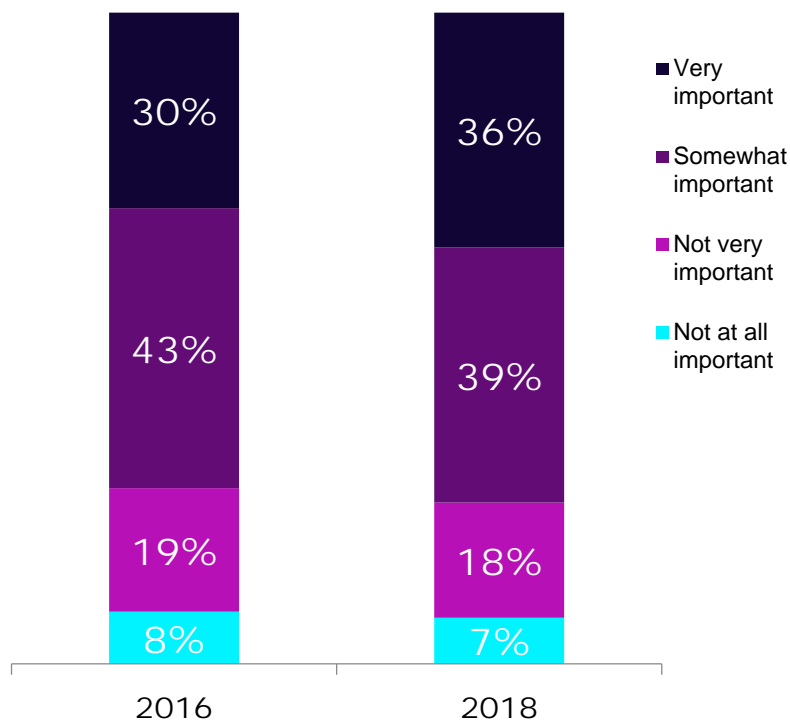
HEALTH INSURANCE STATUS

Employer/union	33%
Individual market	11%
Exchange	9%
Medicare	26%
Medicaid	18%
VA benefits	7%
Other	10%
Uninsured	8%

THE DIGITAL ADVANCE

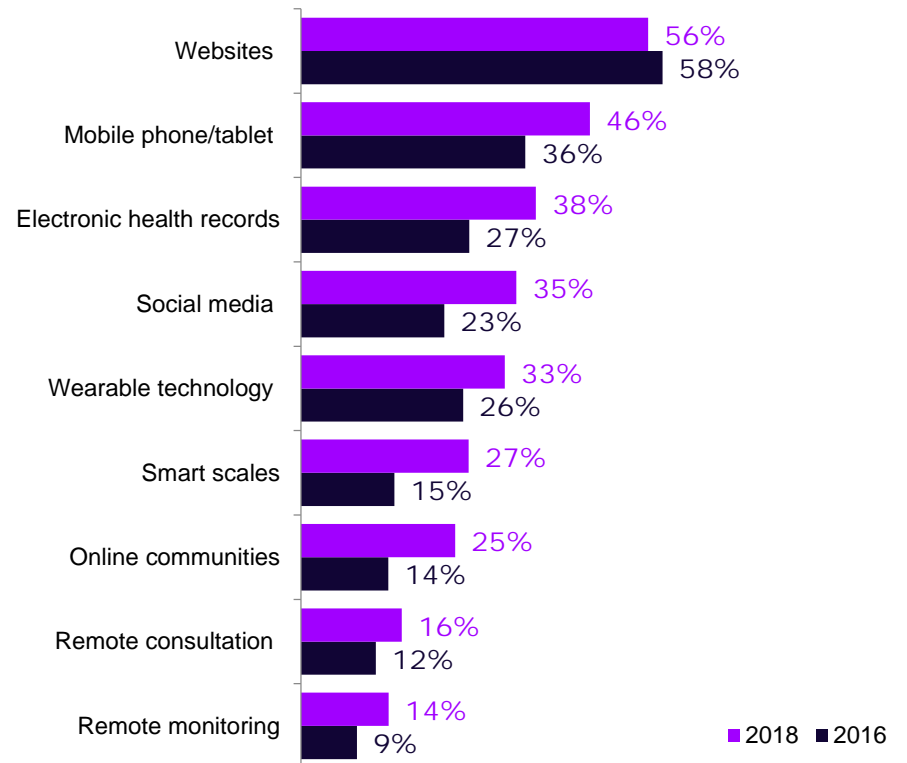
HEALTHCARE TECHNOLOGIES ARE ON THE RISE

THE IMPORTANCE OF TECHNOLOGY



Q: How important is the use of technology when it comes to managing your health?
 Base: U.S. total sample 2016 n = 2,225; 2018 n = 2,301

TECHNOLOGIES USED TO MANAGE HEALTH

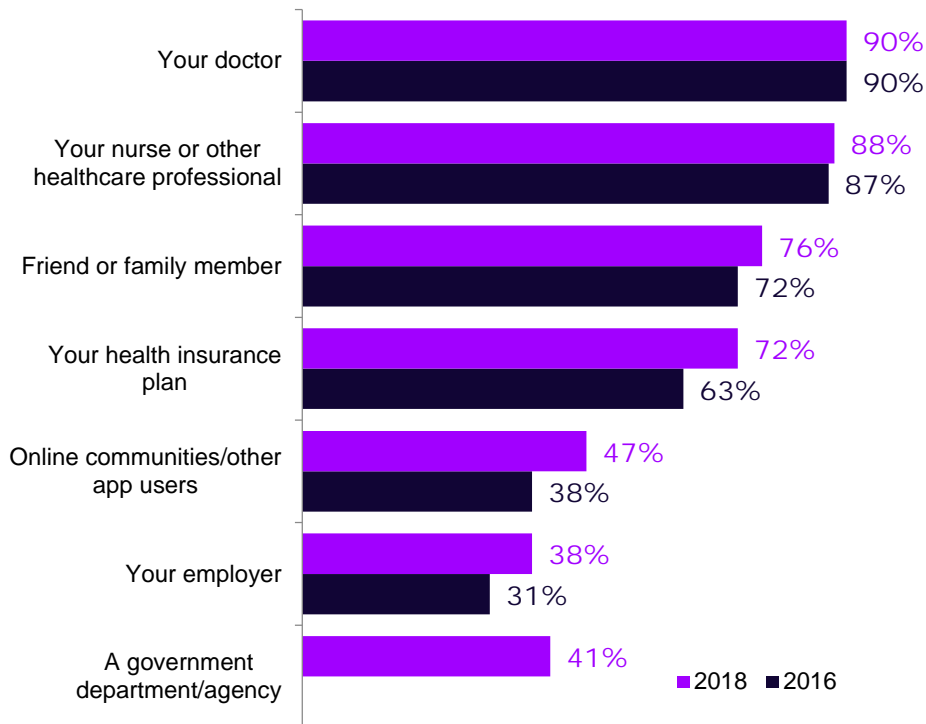


Q: Which of the following technologies or electronic health management tools have you used to manage your health in the past year?
 Base: U.S. respondents who use health technology 2016 n = 1,434; 2018 n = 1,570

ATTITUDES TO WEARABLE TECHNOLOGY

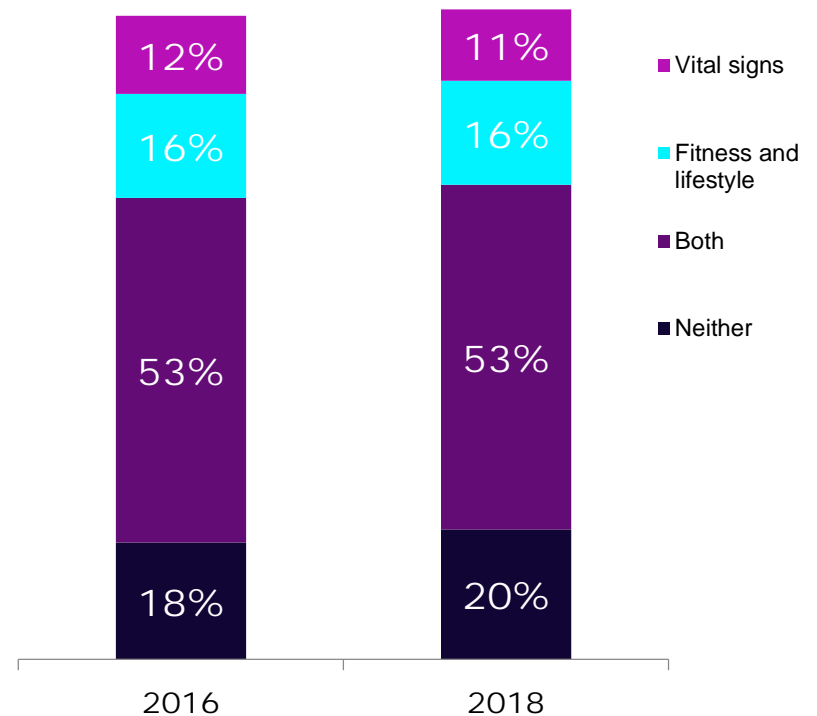
CONSUMERS ARE WILLING TO SHARE DATA FROM WEARABLES

WILLINGNESS TO SHARE WEARABLE HEALTH DEVICE DATA WITH...



Q: How willing would you be to share information from your wearable technology or mobile app with each of the following?
 Base: U.S. total sample 2016 n = 2,225; 2018 n = 2,301
 [Percentages above are the sum of the top two responses on a seven-point scale, where 7 is "very willing"]

WILLINGNESS TO WEAR TECHNOLOGY THAT TRACKS...

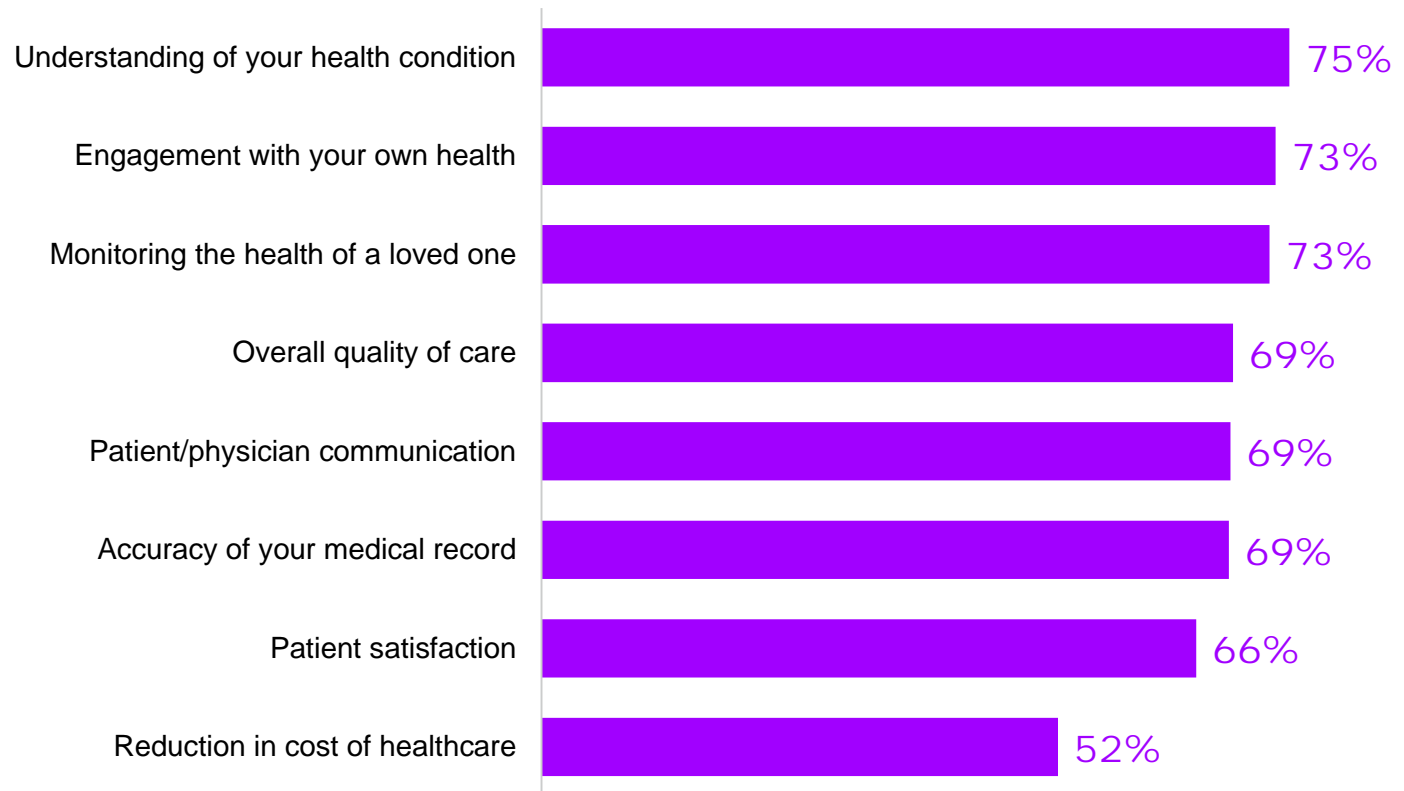


Q: Do you, or would you be willing to, wear technology that measures and tracks...?
 Base: U.S. total sample 2016 n = 2,225; 2018 n = 2,301

ATTITUDES TO WEARABLE TECHNOLOGY

CONSUMERS AGREE THAT WEARABLES ARE HELPFUL

THOSE WHO AGREE THAT WEARABLES HELP FOR...

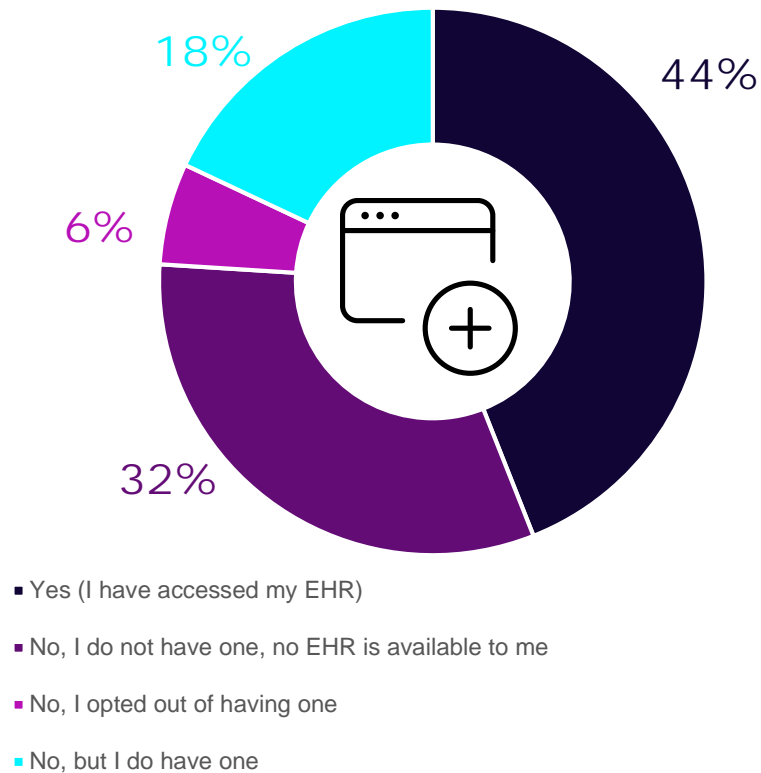


Q: Do you think the use of wearable health devices (for monitoring glucose, heart rate, physical activity, sleep, or weight) helps, hurts, or has no effect on...?
Base: U.S. total sample 2018 n = 2,301

ATTITUDES TO ELECTRONIC HEALTH RECORDS (EHRs)

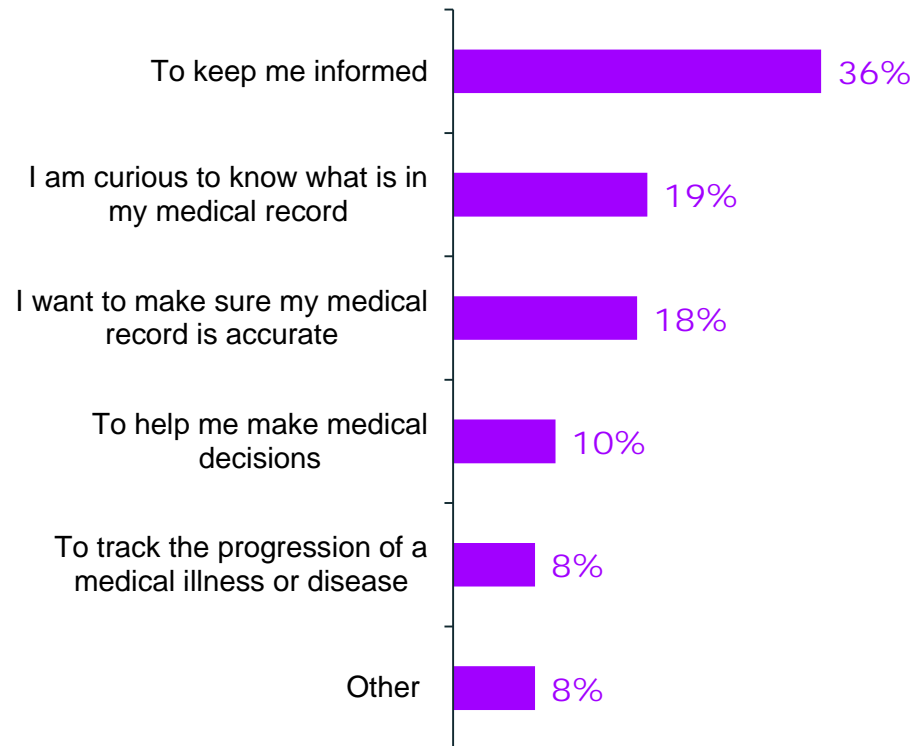
CONSUMERS MAINLY ACCESS THEIR EHRs TO STAY INFORMED

HAVE YOU ACCESSED YOUR EHR?



Q: Have you ever accessed your electronic health record?
Base: U.S. total sample 2018 n = 2,301

PRIMARY REASON TO ACCESS THE EHR

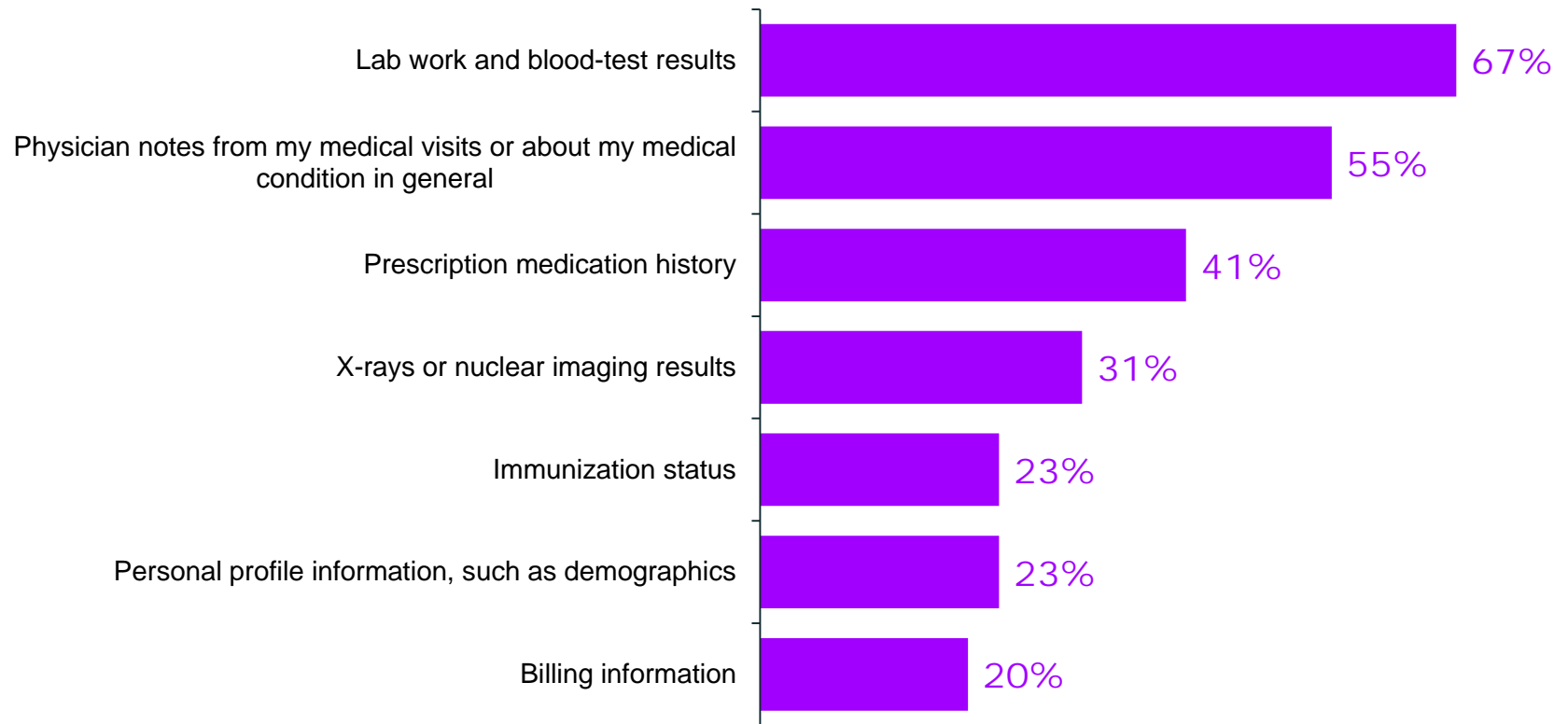


Q: What is the primary reason you access your electronic health records?
Base: U.S. respondents who have accessed their EHR 2018 n = 1,007

ELECTRONIC HEALTH RECORDS DATA

EHRs ARE MOST HELPFUL FOR TEST RESULTS

THE MOST HELPFUL EHR INFORMATION

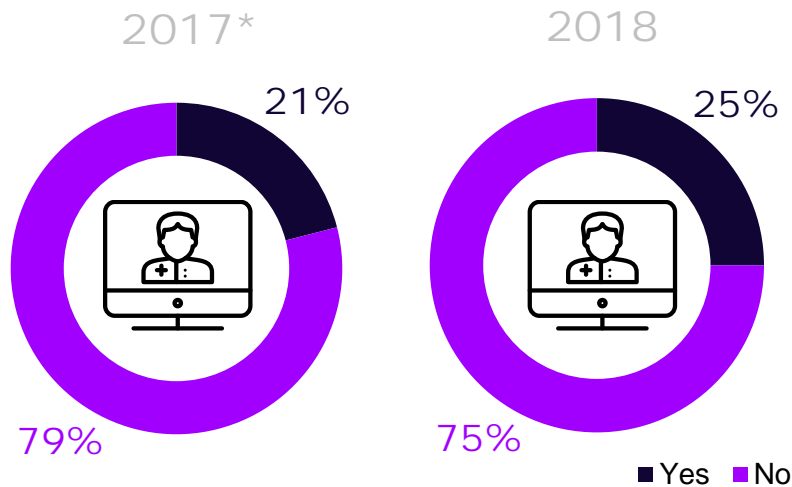


Q: Which of the following types of information in your electronic health record most helps you manage your health?
Base: U.S. respondents who have accessed their EHR 2018 n = 1,007
[Respondents were asked to select up to three options]

USE OF VIRTUAL CARE

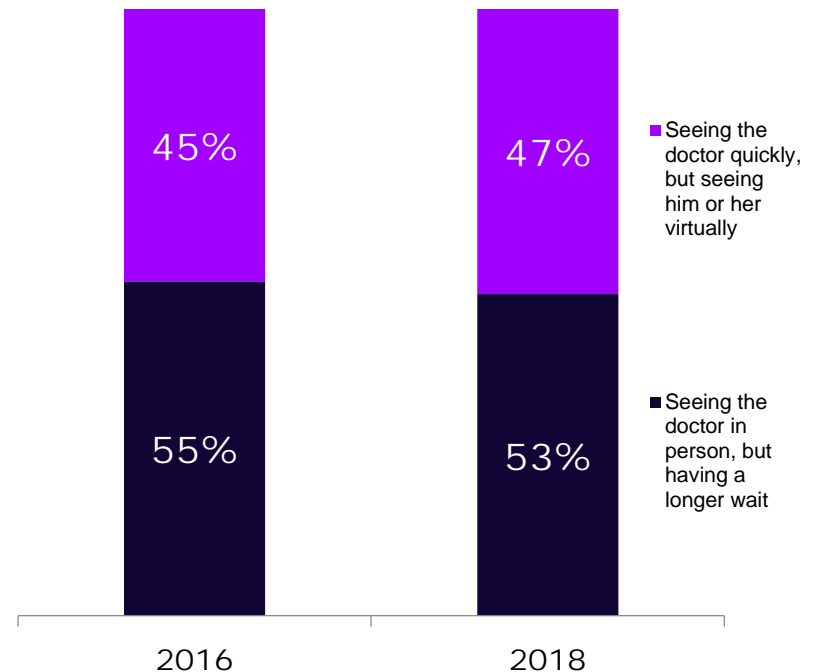
MORE CONSUMERS ARE ACCESSING VIRTUAL CARE SERVICES

HAVE YOU PERSONALLY RECEIVED ANY VIRTUAL HEALTHCARE?



Q: Have you personally received any kind of healthcare virtually?
Base: U.S. total sample 2017 n = 1,501; 2018 n = 2,301
*Data from the Accenture Consumer Survey on Virtual Health, 2017

PREFERENCES FOR VIRTUAL VERSUS IN-PERSON SERVICES



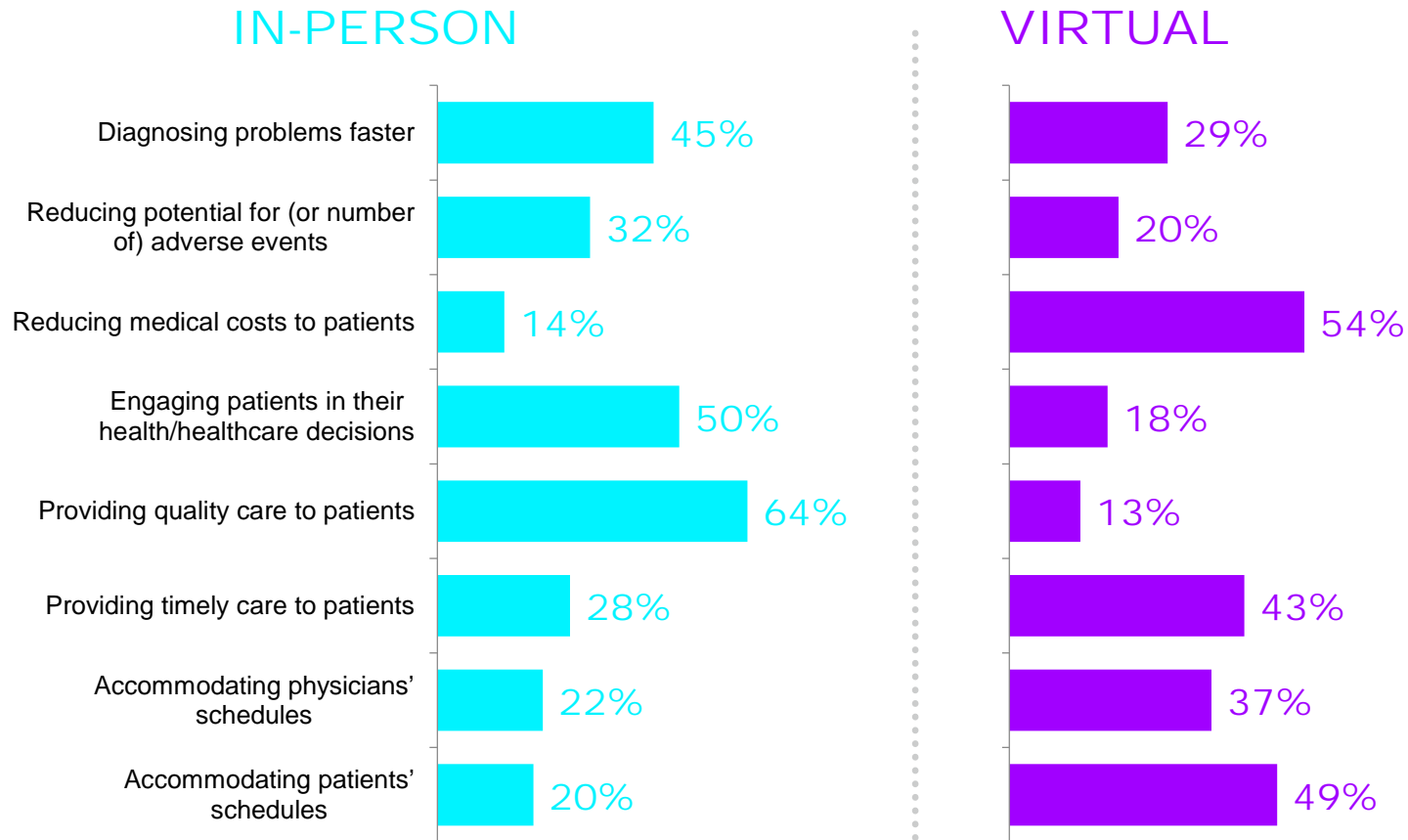
Q: If you had to choose, what would you prefer?
Base: U.S. total sample 2016 n = 2,225; 2018 n = 2,301

The definition of "virtual health" provided to respondents: "With virtual health, the person(s) providing the service(s) would be in a different location. The support and care (which you may be used to receiving in person) would be provided through video, mobile device apps, secure email, text/SMS messaging or online social platforms."

ATTITUDES TO VIRTUAL CARE

COST REDUCTION IS THE TOP ADVANTAGE

THE TOP ADVANTAGES OF IN-PERSON AND VIRTUAL HEALTHCARE

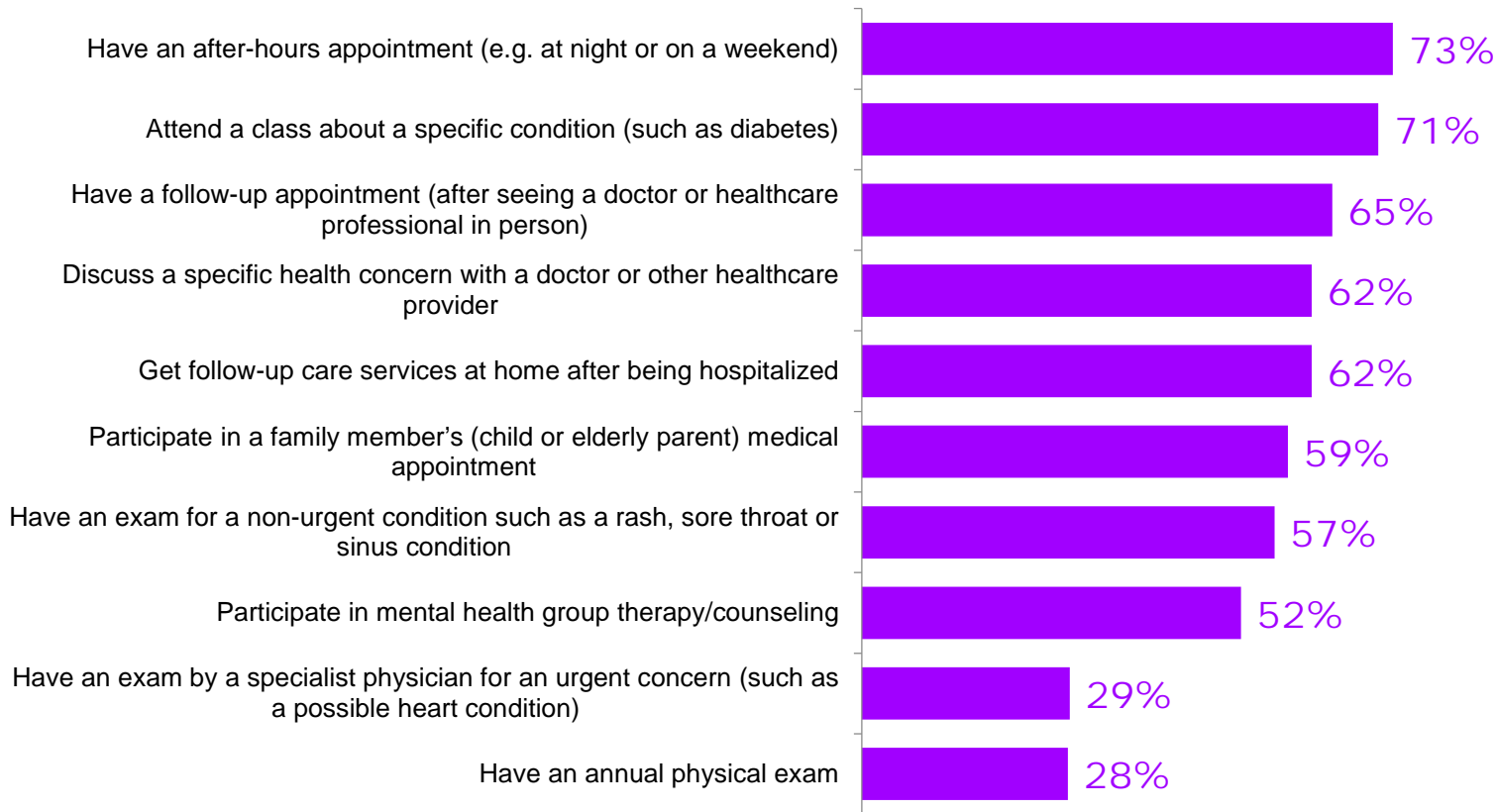


Q: From the list, please select the top three advantages of in-person patient visits and the top three advantages of virtual consultations
Base: U.S. total sample 2018 n = 2,301

APPLICATIONS OF VIRTUAL CARE

AFTER-HOURS CARE IS THE MOST POPULAR USE

WHICH WOULD RESPONDENTS DO VIRTUALLY?



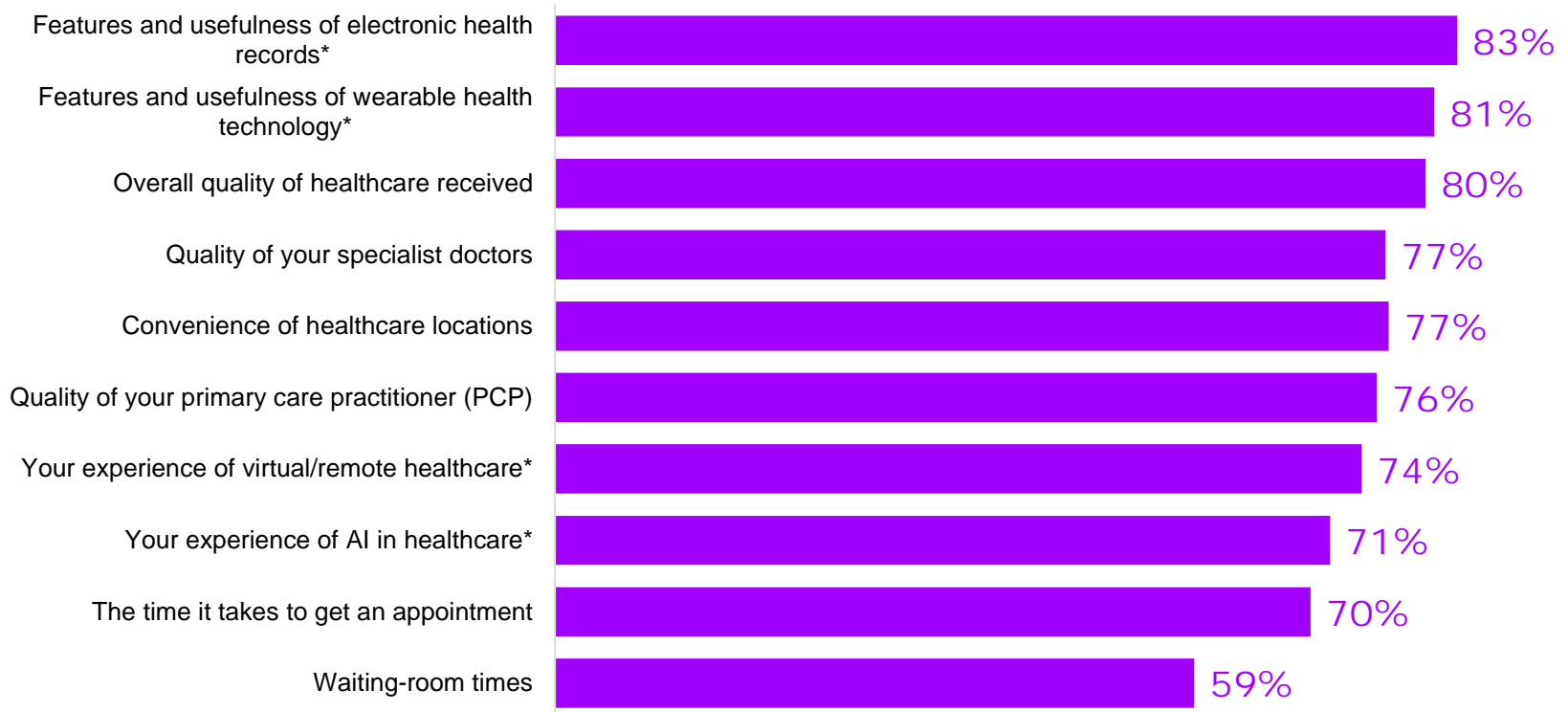
Q: Which of the following, if any, would you do virtually if given the choice?

Base: U.S. total sample n = 2,301

HEALTHCARE SATISFACTION

CONSUMERS ARE POSITIVE ABOUT EHRs, WEARABLES, VIRTUAL HEALTH, AND AI

SATISFACTION WITH THE FOLLOWING ASPECTS OF HEALTHCARE



Q: Overall, how satisfied are you with the following aspects of healthcare services you have received?

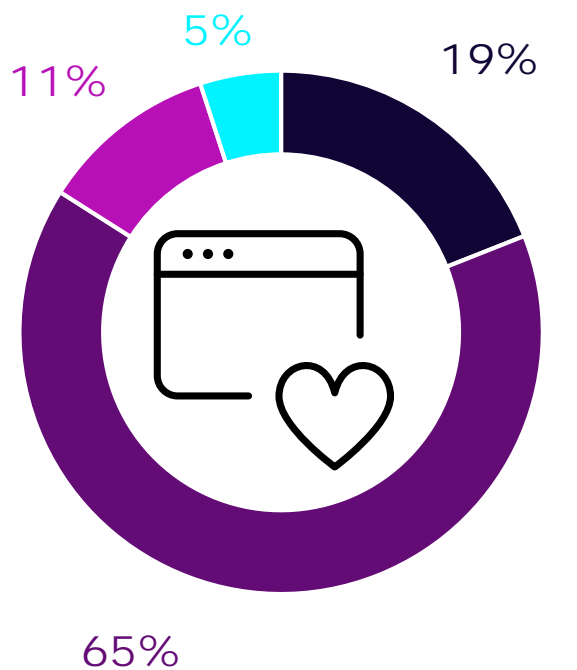
Base: U.S. total sample 2018 n = 2,301 *Only asked of those with relevant experience (determined by responses to Q1.4, Q1.8, Q2.1 and Q3.2)

[Percentages above are the sum of the top three responses on a seven-point scale, where 7 is "very satisfied"]

USE OF ARTIFICIAL INTELLIGENCE (AI)

ABOUT ONE IN FIVE CONSUMERS HAS EXPERIENCED HEALTH-RELATED AI

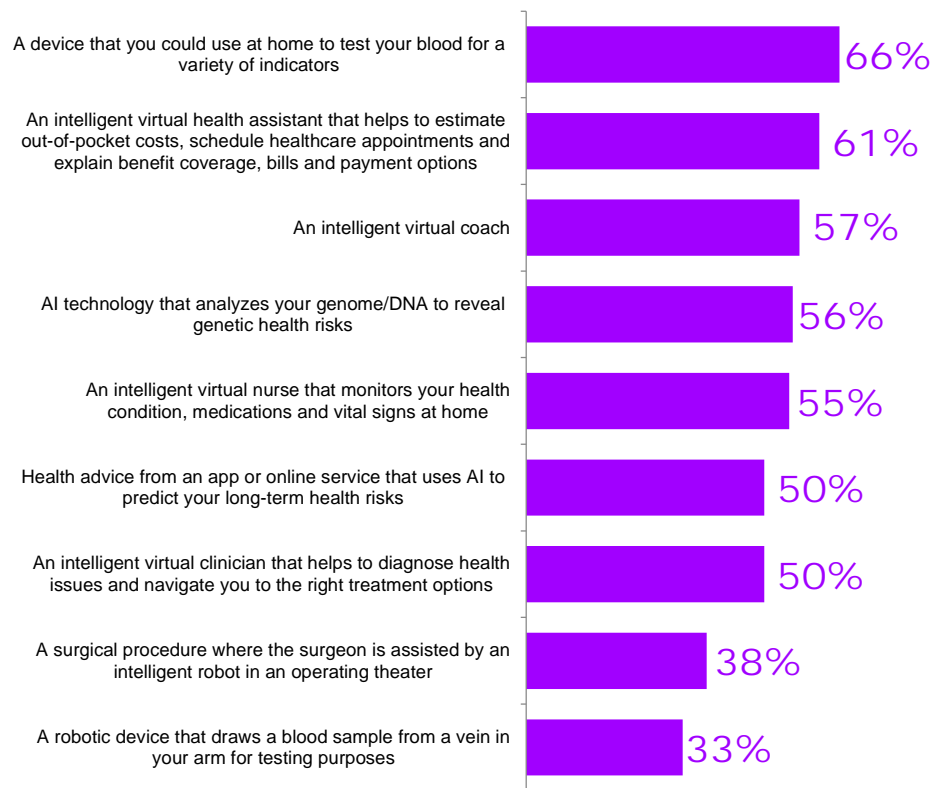
EXPERIENCE WITH HEALTH-RELATED AI



■ Yes ■ No ■ Probably/maybe ■ Don't know

Q: Have you ever interacted with any AI technology that relates to your health?
Base: U.S. total sample n = 2,301

LIKELIHOOD OF USING CERTAIN AI SERVICES



Q: How likely would you be to use the following (artificial intelligence) services?
Base: U.S. total sample n = 2,301

[Percentages above are the sum of the top three responses on a seven-point scale, where 7 is "very likely"]

ATTITUDES TO ARTIFICIAL INTELLIGENCE

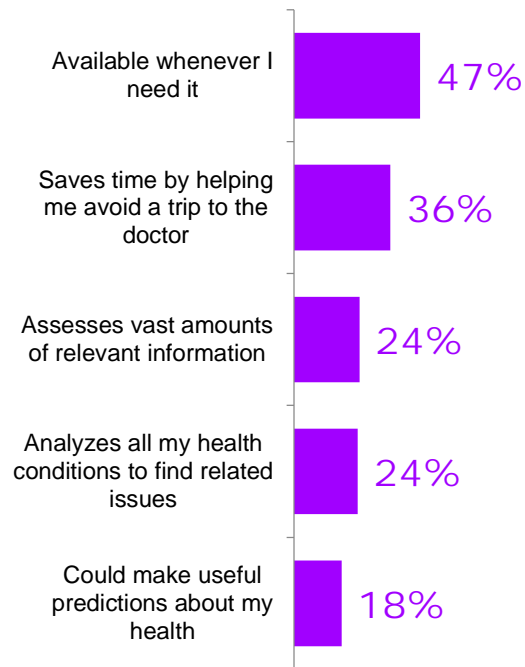
CONSUMERS ARE ATTRACTED TO THE CONVENIENCE OF AI-POWERED HEALTH SERVICES

Imagine your health service provided you with an artificially intelligent virtual doctor at no extra cost.

You can access the AI-powered virtual doctor on any device you choose (e.g. computer, cellphone, tablet, watch, and voice-enabled home device), and you can speak or write to it using natural language.

The AI-powered virtual doctor talks back to you, asks questions about your condition, provides detailed medical advice, and helps you navigate healthcare services.

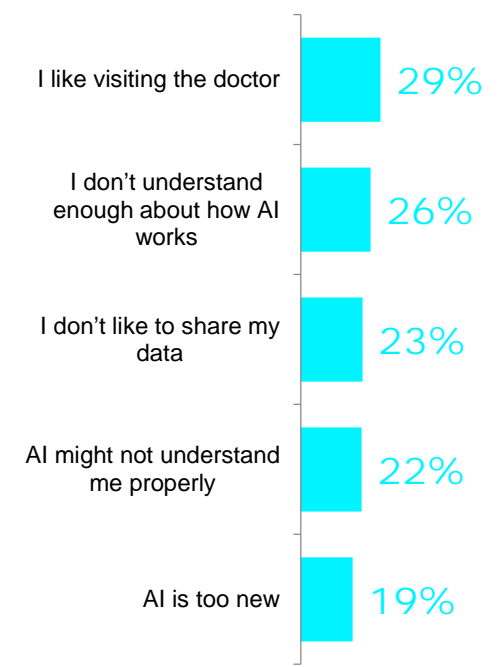
WHY WOULD YOU USE IT?



Q: Your responses to the previous question suggest you are likely to use an AI-powered virtual doctor. Why is this? Please select up to two reasons

Base: U.S. likely to use AI doctor, n=1185

WHY WOULDN'T YOU USE IT?



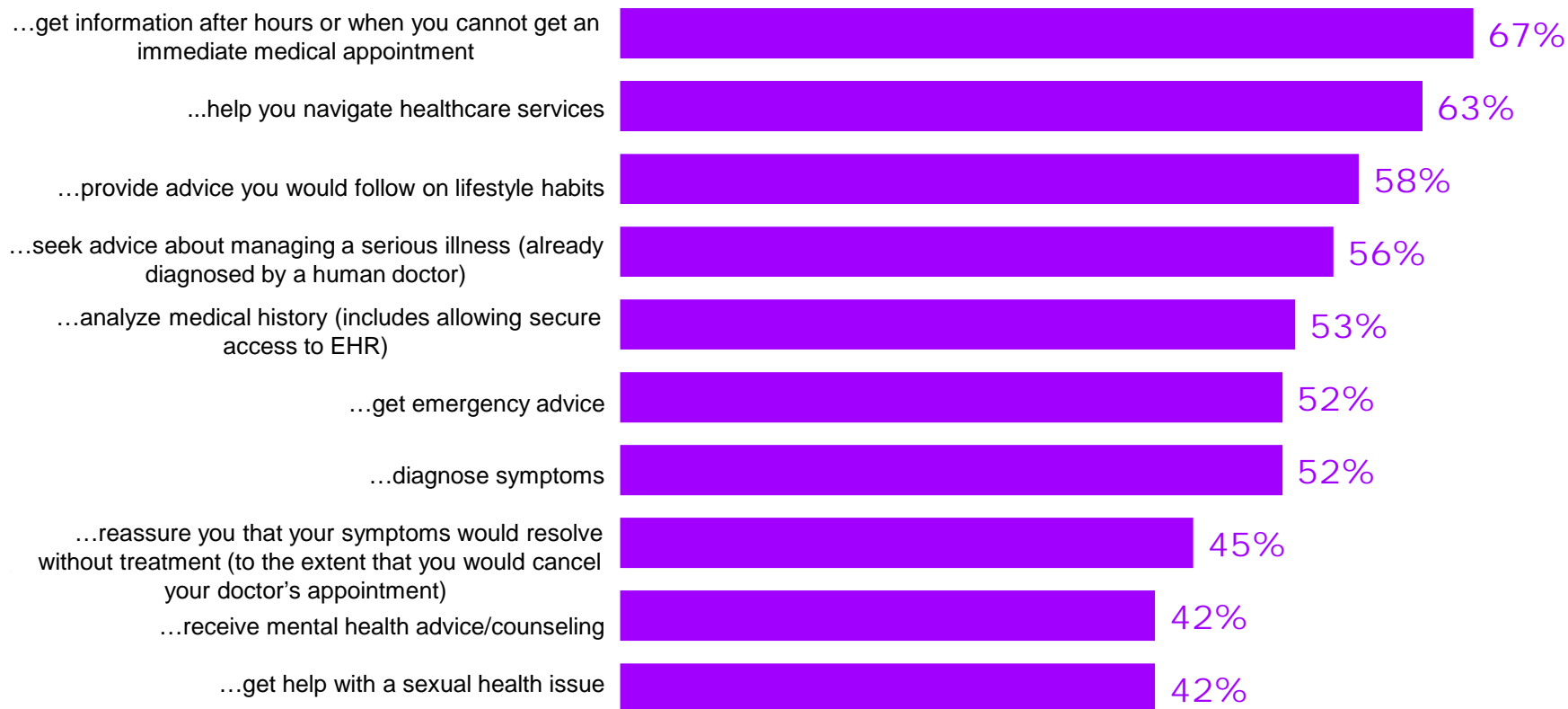
Q: Your responses to the previous question suggest you are unlikely to use an AI-powered virtual doctor. Why is this? Please select up to two reasons

Base: U.S. not likely to use AI doctor, n=1100

ATTITUDES TO ARTIFICIAL INTELLIGENCE

RESPONDENTS ARE LIKELY TO USE AI-POWERED SERVICES AFTER HOURS

LIKELIHOOD OF USING AN AI-POWERED SERVICE TO...



Q: Please indicate how likely you would be to use AI-powered services to...

Base: U.S. total sample n = 2,301

[Percentages above are the sum of the top three responses on a seven-point scale, where 7 is "very likely"]

ATTITUDES TO ROBOT-ASSISTED SURGERY

LEARNING OF THE BENEFITS CHANGES MINDS

WHEN WOULD YOU CHOOSE ROBOT-ASSISTED SURGERY?

THE BENEFITS OF A ROBOT-ASSISTED APPROACH

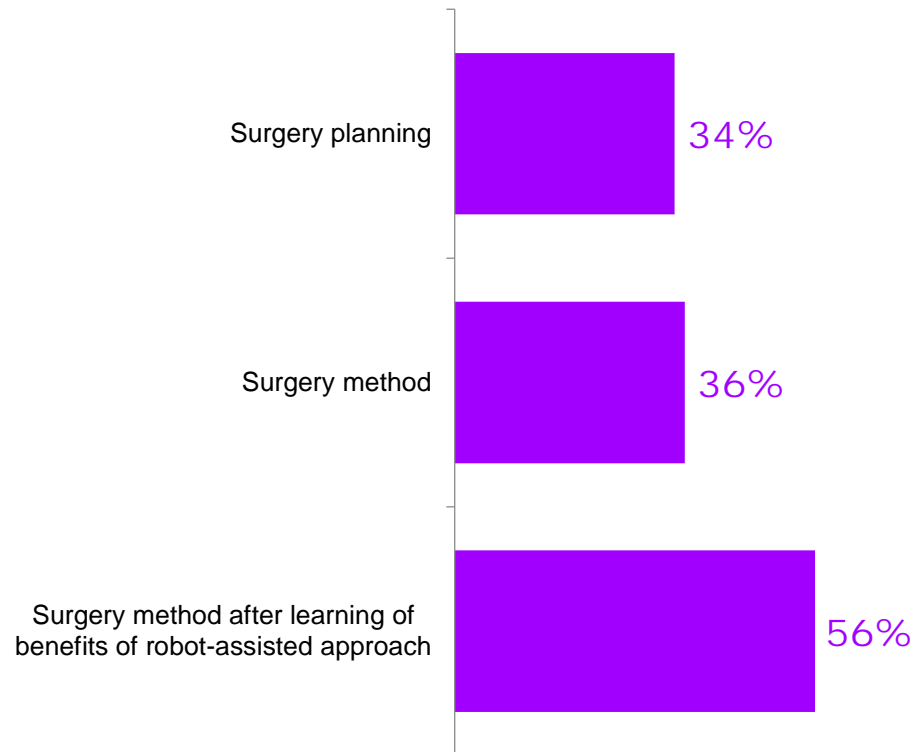
An independent research study comparing robot-assisted and traditional surgery shows clear advantages of robot-assisted surgery:

Option 1. Traditional surgery

- A larger incision is needed for the surgeon to see the spine and gain access to it with their surgical tools.
- Traditional surgery has higher complication rates.

Option 2. Robot-assisted surgery

- Surgery is more accurate.
- Robot-assisted surgery has lower complication rates.



Q: Imagine you require surgery on your spine to fix chronic, debilitating back pain from degenerative disc disease. Which type of surgery planning would you prefer?

Q: The plan for your spinal surgery has been made. Which surgery method would you prefer?

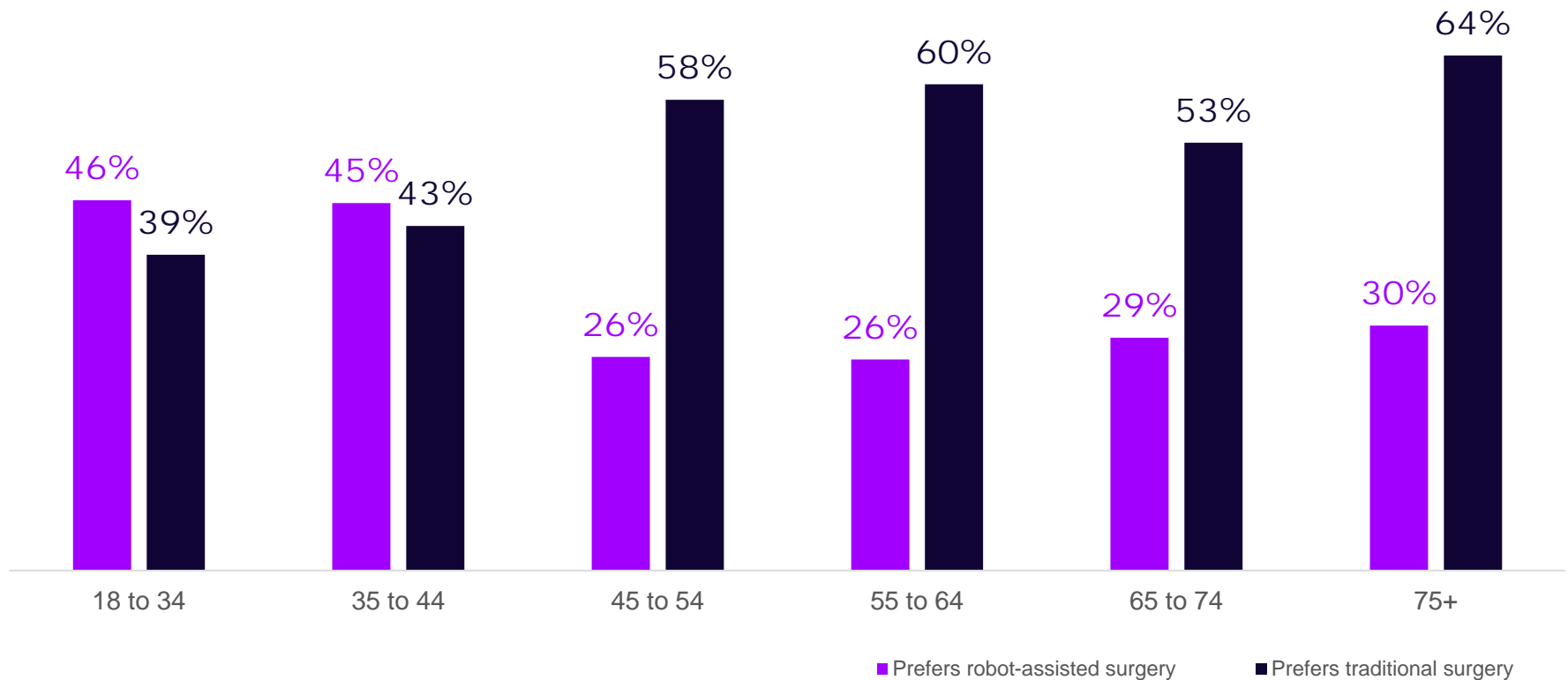
Q: Finally, imagine you learn more about the differences between your spinal surgery options. Which would you prefer?

Base: U.S. total sample 2018, n=2301

ATTITUDES TO ROBOT-ASSISTED SURGERY

AGE GROUPS UNDER 45 ARE MORE ENTHUSIASTIC

CHOICE OF ROBOT-ASSISTED OR TRADITIONAL SURGERY, BY AGE GROUP



Q: Finally, imagine you learn more about the differences between your spinal surgery options. Which would you prefer?

Base: U.S. total sample n = 2,301

[Percentages above are the sum of the top three responses on a seven-point scale, where 7 is "strongly prefer"]