Overview

• Accenture commissioned a seven-country survey of 7,840 consumers ages 18+ to assess their attitudes toward health, the healthcare system, electronic health records, healthcare technology and their healthcare providers’ electronic capabilities.

• The online survey included consumers across seven countries: Australia (1013), Brazil (1006), England (1009), Norway (800), Saudi Arabia (852), Singapore (935) and the United States (2225).

• The seven-country survey was conducted by Nielsen on behalf of Accenture between November 2015 and January 2016 (The US survey was conducted online between November 13 and December 2, 2015).

• The analysis provided comparisons by country, sector, age and use.

• Where relevant, the survey uses select findings from the 2015 Accenture Doctors Survey to compare the doctor and consumer responses.
Method

With whom did Accenture work to conduct the quantitative survey?

Accenture worked with Nielsen, who was responsible for the entire project including recruitment, screening of respondents, questionnaire development, analysis and report development.

Who was surveyed?

Approximately, n=7840 consumers total, ages 18+, in the US, Australia, Brazil, England, Norway, Saudi Arabia, Singapore, and the US who agreed to take part in the survey. This report includes results for US respondents only (n=2225).

How did Accenture recruit study participants?

In the US, respondents were contacted through direct email invitations and notifications; respondents are able to follow a unique link to the survey and complete it anonymously. Similar methods were used in other countries.

Are we confident in the quality of the respondents and that they meet the study criteria?

All participants are consumers, ages 18+, residing in the countries specified and nationally representative on age and gender. Participants’ details are double verified and were rescreened for this study to ensure participant quality.

Was the questionnaire translated into the appropriate native language?

Yes, the survey was translated into: Portuguese (Brazil); Norwegian (Norway); Arabic (Saudi Arabia). English (localized) was used for England, Australia, Singapore, and Saudi Arabia (English and Arabic options offered).

What did we do to ensure balance and a representative sample?

In the US, data were weighted by education, age by sex, race/ethnicity, region, and income to be nationally representative of the general population. However, because 2014 data were not weighted, all data for trended questions are not weighted. This is indicated on each slide.
Research Results:
Key Findings
More consumers with EHRs have accessed their records

Have Ever Accessed EHR

2014

73%

27%

2016

55%

45%

No

Yes

BASE: HAS EHR (2014 n=1585; 2016 n=1654)
Q820 (Q158): Have you ever accessed your electronic health records?
NOTE: unweighted data
Top users of EHRs are consumers 65-74 and the use of apps, wearables, and social media to manage health is more pronounced with consumers 18-44

### Technology or Electronic Health Management Tools Used

<table>
<thead>
<tr>
<th>Technology or Electronic Health Management Tools</th>
<th>US TOTAL</th>
<th>18-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites</td>
<td>57%</td>
<td>54%</td>
<td>56%</td>
<td>58%</td>
<td>61%</td>
<td>55%</td>
<td>56%</td>
</tr>
<tr>
<td>Mobile phone/tablet app</td>
<td>33%</td>
<td>48%</td>
<td>37%</td>
<td>30%</td>
<td>19%</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Electronic health records</td>
<td>27%</td>
<td>22%</td>
<td>23%</td>
<td>29%</td>
<td>32%</td>
<td>38%</td>
<td>31%</td>
</tr>
<tr>
<td>Wearable technology</td>
<td>21%</td>
<td>26%</td>
<td>25%</td>
<td>21%</td>
<td>15%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Social media</td>
<td>21%</td>
<td>32%</td>
<td>19%</td>
<td>21%</td>
<td>13%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Smart scales</td>
<td>13%</td>
<td>20%</td>
<td>16%</td>
<td>8%</td>
<td>11%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Remote consultation</td>
<td>12%</td>
<td>11%</td>
<td>13%</td>
<td>9%</td>
<td>11%</td>
<td>18%</td>
<td>11%</td>
</tr>
<tr>
<td>Online support communities</td>
<td>12%</td>
<td>16%</td>
<td>11%</td>
<td>13%</td>
<td>10%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Remote monitoring</td>
<td>8%</td>
<td>13%</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>1%</td>
<td>0</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>None</td>
<td>10%</td>
<td>7%</td>
<td>6%</td>
<td>10%</td>
<td>13%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**BASE:** USES TECHNOLOGY TO MANAGE HEALTH

Q625 (Q126) Which of the following technology or electronic health management tools have you used to manage your health in the past year?

**NOTE:** unweighted data

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Consumers with EHRs are more certain of what data are in their records; lab work and prescription history are most commonly available.

### EHR Data Have Access To

<table>
<thead>
<tr>
<th>Data Category</th>
<th>2016</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab work and blood test results</td>
<td>48%</td>
<td>24%</td>
</tr>
<tr>
<td>Prescription medication history</td>
<td>44%</td>
<td>23%</td>
</tr>
<tr>
<td>Immunization status</td>
<td>37%</td>
<td>16%</td>
</tr>
<tr>
<td>Personal profile information, such as demographics</td>
<td>36%</td>
<td>15%</td>
</tr>
<tr>
<td>Billing information</td>
<td>35%</td>
<td>18%</td>
</tr>
<tr>
<td>Physician notes from my visits or about my condition</td>
<td>33%</td>
<td>15%</td>
</tr>
<tr>
<td>X-rays or nuclear imaging results</td>
<td>29%</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>35%</td>
<td>0%</td>
</tr>
<tr>
<td>I do not know what information I have access to</td>
<td>61%</td>
<td>1%</td>
</tr>
</tbody>
</table>

**BASE: HAS EHR (2014 n=2011; 2016 n=1654)**

Q845 (Q160): Which of the following data in electronic health records do you have access to?

NOTE: unweighted data
Primary Reason Access EHR

- **Keep me informed**
  - 2016: 41%
  - 2014: 43%
- **Curiosity about what in medical record**
  - 2016: 25%
  - 2014: 17%
- **Make sure record is accurate**
  - 2016: 16%
  - 2014: 18%
- **Track progression of medical illness or disease**
  - 2016: 10%
  - 2014: 12%
- **Help me make medical decisions**
  - 2016: 6%
  - 2014: 9%
- **Other**
  - 2016: 2%
  - 2014: 2%

**BASE: HAS ACCESSED EHR (2014 n=434; 2016 n=738)**

Q821 (Q169): What is the primary reason you access your electronic health records?

**NOTE:** unweighted data
Lab work and blood test results in EHRs are most helpful for managing health

EHR Data that **Most** Helps Manage Health

- Lab work and blood test results: 41%
- Physician notes from my visits or about my condition: 24%
- Prescription medication history: 9%
- Personal profile information, such as demographics: 5%
- Immunization status: 5%
- X-rays or nuclear imaging results: 5%
- Billing information: 5%
- Other: 0%
- None of the above: 6%

**BASE: KNOWS WHAT DATA HAVE ACCESS TO IN EHR, HAVE ACCESS TO MULTIPLE TYPES OF DATA; 2016 (n=906)**

Q850 Which of the following types of information in your electronic health record most helps you manage your health?
Consumers want more access to their EHR than they currently have and than doctors are willing to give.

**Level of Access Patient SHOULD Have to EHR**
- **Any Access**
  - Consumers: 99%
  - Doctors*: 92%
- **Limited Access**
  - Consumers: 7%
  - Doctors*: 18%
- **Full Access**
  - Consumers: 7%
  - Doctors*: 74%

**Level of Access Patient DOES Have to EHR**
- **Any Access**
  - 76%
- **Limited Access**
  - 49%
- **Full Access**
  - 27%

**Type of Information Patient Should See in EHR**
- **Summary version of what doctor sees**
  - 77%
- **Exactly what the doctor sees**
  - 23%

**Level of Access Patient SHOULDN’T Have to EHR**
- **Any Access**
  - 1%
- **Limited Access**
  - 7%
- **Full Access**
  - 74%

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**BASE: ALL QUALIFIED RESPONDENTS (2016 n=2225)**
- Q830 (D905/710): What level of access should you as a patient have to your electronic health record, created by your physician?
- Q840 (D905/710): What level of access do you as a patient have to your electronic health record, created by your physician?

**BASE: SHOULD HAVE ACCESS TO EHR (2016 n=2203)**
- Q835: What information should you as a patient see in your electronic health record?

*2015 Accenture Doctors Survey (n=601)
Growing gap among patients and doctors on “Full Access” to EHRs

Level of Access Patient Should Have to Personal Electronic Health Record

<table>
<thead>
<tr>
<th>Year</th>
<th>DOCTORS</th>
<th>CONSUMERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>65%</td>
<td>4%</td>
</tr>
<tr>
<td>2015</td>
<td>74%</td>
<td>14%</td>
</tr>
<tr>
<td>2016</td>
<td>92%</td>
<td>0%</td>
</tr>
</tbody>
</table>

DOCTORS BASE: ALL QUALIFIED RESPONDENTS (2016 n=601)
Q905/Q710. What level of access should a patient have to his or her electronic personal health record?

CONSUMERS BASE: ALL QUALIFIED RESPONDENTS (2016 n=2225)
Q830 (D905/710) What level of access should you as a patient have to your electronic health record, created by your physician?

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US consumers and doctors agree that patients should update EHRs with demographic, medical history, and symptom information

Level of Patient Updating to Electronic Personal Health Record (1 of 2)

<table>
<thead>
<tr>
<th>Update Any</th>
<th>Consumers</th>
<th>Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>86%</td>
<td>95%</td>
</tr>
<tr>
<td>Demographic information</td>
<td>58% (15%)</td>
<td>72% (23%)</td>
</tr>
<tr>
<td>Personal medical history</td>
<td>83% (26%)</td>
<td>90% (40%)</td>
</tr>
<tr>
<td>Family medical history</td>
<td>89% (10%)</td>
<td>93% (7%)</td>
</tr>
<tr>
<td>New symptoms</td>
<td>87% (10%)</td>
<td>83% (14%)</td>
</tr>
<tr>
<td>Change in Symptoms</td>
<td>86% (14%)</td>
<td>84% (16%)</td>
</tr>
</tbody>
</table>

BASE: ALL QUALIFIED RESPONDENTS 2015 Accenture Doctors Survey (n=601); 2016 Accenture Consumers Survey (n=2225)

Q880 (D910/712) How much of each of the following types of information should you, as a patient be able to update in your electronic personal health record?
Many US consumers and doctors say patients should *not* update lab test results.

### Level of Patient Updating to Electronic Personal Health Record (2 of 2)

<table>
<thead>
<tr>
<th>Update Any</th>
<th>Consumers</th>
<th>Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td>75%</td>
<td>51%</td>
<td>24%</td>
</tr>
<tr>
<td>88%</td>
<td>57%</td>
<td>31%</td>
</tr>
<tr>
<td>84%</td>
<td>58%</td>
<td>26%</td>
</tr>
<tr>
<td>86%</td>
<td>49%</td>
<td>37%</td>
</tr>
<tr>
<td>86%</td>
<td>59%</td>
<td>27%</td>
</tr>
<tr>
<td>88%</td>
<td>53%</td>
<td>35%</td>
</tr>
<tr>
<td>57%</td>
<td>42%</td>
<td>15%</td>
</tr>
<tr>
<td>63%</td>
<td>33%</td>
<td>30%</td>
</tr>
<tr>
<td>79%</td>
<td>50%</td>
<td>29%</td>
</tr>
<tr>
<td>83%</td>
<td>46%</td>
<td>36%</td>
</tr>
</tbody>
</table>

- **New medications**
  - Consumers: 75%
  - Doctors: 57%

- **Medication side effects**
  - Consumers: 84%
  - Doctors: 58%

- **Allergic episodes**
  - Consumers: 86%
  - Doctors: 59%

- **Lab test results**
  - Consumers: 88%
  - Doctors: 53%

- **Self-measured metrics**
  - Consumers: 57%
  - Doctors: 42%

### BASE: ALL QUALIFIED RESPONDENTS
2015 Accenture Doctors Survey (n=601); 2016 Accenture Consumers Survey (n=2225)
Q880 (D910/712) How much of each of the following types of information should you, as a patient be able to update in your electronic personal health record?
US consumers view EHRs as a tool primarily for their doctors and themselves, not accessible to others

Who should have access to your EHR?

- My primary doctor: 75%
- Me: 67%
- My other doctors or specialists: 55%
- Anyone I give permission to: 52%
- Hospitals I visit: 51%
- Urgent care centers I visit: 32%
- Doctor/Specialist performing procedure in other...: 30%
- My pharmacy: 28%
- Family members: 22%
- Caregiver: 20%
- Retail clinics I visit: 9%
- An overseas health expert performing clinical...: 8%
- My employer: 3%
- The government: 3%

BASE: ALL QUALIFIED RESPONDENTS (2016 n=2225)
Q825 Who should have access to your electronic health records?
Compared to 2014, more consumers who use health technology are using apps and wearables.

Technology or Electronic Health Management Tools Used

- Websites: 57% (2016), 55% (2014)
- Mobile phone/tablet app: 16% (2016), 33% (2014)
- Electronic health records: 27% (2016), 32% (2014)
- Wearable technology: 9% (2016), 21% (2014)
- Social media: 14% (2016), 21% (2014)
- Smart scales: 10% (2016), 13% (2014)
- Remote consultation: 12% (2016), 12% (2014)
- Online support communities: 10% (2016), 12% (2014)
- Remote monitoring: N/A, 8% (2014)
- Other: 2% (2016), 2% (2014)
- None: 10% (2016), 22% (2014)

BASE: USES TECHNOLOGY TO MANAGE HEALTH (2014 n=1605; 2016 n=1434) Q625 (Q126) Which of the following technology or electronic health management tools have you used to manage your health in the past year? NOTE: unweighted data
Among US health app users, fitness apps are the most popular, followed closely by diet and nutrition apps.

Type of App(s) Used

- Fitness: 59%
- Diet/Nutrition: 52%
- Symptom navigator: 36%
- Patient portal app: 28%
- Health or condition tracker: 25%
- Medication tracker/reminder/manager: 12%
- Chronic condition or disease management: 10%
- Something else: 6%

BASE: USED APPS IN PAST YEAR TO MANAGE HEALTH (2016 n=474)
Q630 What type of app(s) have you used?
Consumers and physicians agree that wearable health devices help patient engagement

<table>
<thead>
<tr>
<th>Effect of Wearables On…</th>
<th>CONSUMER PERSPECTIVE</th>
<th>DOCTOR* PERSPECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement with own health</td>
<td>19% 4% 77%</td>
<td>12% 3% 85%</td>
</tr>
<tr>
<td>Accuracy of medical record</td>
<td>29% 4% 67%</td>
<td>40% 8% 52%</td>
</tr>
<tr>
<td>Patient/physician communication</td>
<td>26% 5% 69%</td>
<td>35% 8% 57%</td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td>31% 4% 64%</td>
<td>22% 5% 73%</td>
</tr>
<tr>
<td>Understanding of health condition</td>
<td>20% 4% 76%</td>
<td>27% 7% 66%</td>
</tr>
<tr>
<td>Overall quality of care</td>
<td>29% 4% 67%</td>
<td>33% 5% 62%</td>
</tr>
<tr>
<td>Reduction in cost of healthcare</td>
<td>41% 8% 51%</td>
<td>43% 21% 36%</td>
</tr>
<tr>
<td>Monitoring the health of a loved one</td>
<td>22% 4% 74%</td>
<td>N/A</td>
</tr>
</tbody>
</table>

BASE: ALL QUALIFIED RESPONDENTS (2016 n=2225)
Q660 (D1070) 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 …?
*2015 Accenture Doctors Survey (n=601)

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Most US consumers wear or would be willing to wear health tracking technology

**Wears or Would Be Willing to Wear Technology to Track…**

- Fitness and lifestyle (only): 15%
- Vital signs (only): 12%
- Both: 51%
- Neither: 21%

**BASE:** ALL QUALIFIED RESPONDENTS (2016 n=2225)

Q645 (Q151) Do you or would you be willing to wear technology that measures and tracks…?

*NOTE: unweighted data*

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Many health app users have shared app data with a medical provider

### Discussed or Shared App Data with Medical Provider

- **Yes**: 40%
- **No**: 60%

**BASE: USED APPS IN PAST YEAR TO MANAGE HEALTH (2016 n=474)**

Q635  Have you discussed or shared data from your app with your doctor or other medical provider?
When recommended by a doctor, 3 in 4 consumers followed advice to wear technology to track health

**Doctor Has Recommended Wearable Technology to Track…**

- Vital signs: 19%
- Fitness and lifestyle: 18%

**Took Doctor’s Advice**

- Yes: 76%
- No: 24%

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**BASE:** ALL QUALIFIED RESPONDENTS (2016 n=2225)
Q650 Has a doctor ever recommended that you wear technology to measure and track the following?

**BASE:** DOCTOR RECOMMENDED WEARABLE (2016 n=461)
Q655 Did you take your doctor’s advice to wear technology to measure and track your fitness and lifestyle or vital signs?
Consumers are willing to share wearable or mobile app data with their doctors; fewer want it shared with employers or insurers

**Willingness to Share Wearable or Mobile App Data**

<table>
<thead>
<tr>
<th></th>
<th>Employer</th>
<th>Online community/Other app users</th>
<th>Health insurance plan</th>
<th>Friend/Family member</th>
<th>Nurse/Other HCP</th>
<th>Doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all willing</td>
<td>10%</td>
<td>11%</td>
<td>21%</td>
<td>23%</td>
<td>48%</td>
<td>60%</td>
</tr>
<tr>
<td>Not very willing</td>
<td>21%</td>
<td>27%</td>
<td>40%</td>
<td>41%</td>
<td>39%</td>
<td>29%</td>
</tr>
<tr>
<td>Somewhat willing</td>
<td>26%</td>
<td>23%</td>
<td>18%</td>
<td>15%</td>
<td>6%</td>
<td>5%</td>
</tr>
<tr>
<td>Very willing</td>
<td>43%</td>
<td>39%</td>
<td>18%</td>
<td>13%</td>
<td>7%</td>
<td>5%</td>
</tr>
</tbody>
</table>

**BASE:** ALL QUALIFIED RESPONDENTS (2016 n=2225)

Q670 How willing would you be to share information from your wearable technology or mobile app (e.g., activity throughout the day, heart rate) with each of the following?

Consumer Online community/ Other app users Health insurance plan Friend/Family member Nurse/Other HCP Doctor

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US doctors and consumers agree that virtual visits offer convenience and lower costs, but quality care is the main advantage of in-person visits.

### Advantages of Virtual or In-Person Visits

#### Percent Ranking Top 3 for In-Person and Virtual

<table>
<thead>
<tr>
<th></th>
<th>CONSUMERS</th>
<th>DOCTORS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Providing quality care to patients</td>
<td>68%</td>
<td>81%</td>
</tr>
<tr>
<td>Diagnosing problems faster</td>
<td>50%</td>
<td>54%</td>
</tr>
<tr>
<td>Engaging patients in decisions</td>
<td>32%</td>
<td>50%</td>
</tr>
<tr>
<td>Reducing adverse events</td>
<td>29%</td>
<td>43%</td>
</tr>
<tr>
<td>Accommodating physicians’ schedule</td>
<td>41%</td>
<td>37%</td>
</tr>
<tr>
<td>Providing timely care to patients</td>
<td>58%</td>
<td>49%</td>
</tr>
<tr>
<td>Accommodating patients’ schedules</td>
<td>52%</td>
<td>80%</td>
</tr>
<tr>
<td>Reducing medical costs to patients</td>
<td>58%</td>
<td>62%</td>
</tr>
</tbody>
</table>

**In-Person**

**Virtual**

*2015 Accenture Doctors Survey (n=601)
In-person visits are still preferred over remote visits, but slightly more US consumers now prefer remote visits.

**Prefer Remote or In-Person Visits**

**2014**
- Remote: 23%
- In-Person: 77%

**2016**
- Remote: 29%
- In-Person: 71%

**BASE: ALL QUALIFIED RESPONDENTS (2014 n=2011; 2016 n=2225)**

Q750 (Q199) Which of the following is closer to your view?

NOTE: unweighted data

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