CONNECTED PATIENT REPORT
The trail map for understanding today’s digital patient
Introduction

To understand how Americans communicate with their healthcare providers, insurance payers and pharmaceutical firms — and their thoughts on up-and-coming technologies in healthcare such as artificial intelligence (AI) — Salesforce commissioned its “2017 Connected Patient Report.” The survey was conducted online by Harris Poll on behalf of Salesforce from May 4-8, 2017, among 2,083 U.S. adults, ages 18 and older, among whom 1,893 have health insurance.

The data shows that a number of American patients (defined as those who have health insurance and a primary care doctor) primarily communicate with their health insurance providers via the phone, but nearly three quarters of Americans think it’s important that their provider uses modern tools like web portals, live chat/instant message or two-way video. Patients are similarly open to communicating with pharmaceutical companies, with 83% stating they would share direct feedback about a medication with a drug company to help improve their ability to develop and support new medications. Finally, the report identified generational gaps regarding the use of artificial intelligence (AI) in healthcare. While younger Americans are interested in AI like digital assistants in healthcare, older Americans tended to be more excited by AI if it can help their doctors spend more time to focus on their health.
I. Doctor-patient communication today

To schedule appointments, a majority of American patients currently communicate with their doctors via traditional channels, with 80% using the phone, compared to online portals (13%) or email (9%).

**Base: All Respondents**

Do you have health insurance?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Generations</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby Boomers (55+)</td>
<td>82%</td>
<td>18%</td>
</tr>
<tr>
<td>Generation X (35-54)</td>
<td>88%</td>
<td>12%</td>
</tr>
<tr>
<td>Millennials (18-34)</td>
<td>96%</td>
<td>4%</td>
</tr>
</tbody>
</table>

*An asterisk (*) signifies a value of less than one-half percent.
A dash represents a value of zero.*

**Base: Have Health Insurance and Primary Care Doctor**

Which of the following, if any, do you use to communicate with your primary care doctor for each of the following? Set up an appointment

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>80%</td>
<td>79%</td>
<td>82%</td>
<td>80%</td>
</tr>
<tr>
<td>In person</td>
<td>25%</td>
<td>32%</td>
<td>24%</td>
<td>22%</td>
</tr>
<tr>
<td>Portal</td>
<td>13%</td>
<td>15%</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Email</td>
<td>9%</td>
<td>16%</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>SMS/Text</td>
<td>3%</td>
<td>9%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Mail</td>
<td>2%</td>
<td>7%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Chat/IM</td>
<td>1%</td>
<td>5%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>*</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>3%</td>
<td>6%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Salesforce Research

2017 Connected Patient Report / 3
Yet when communicating with primary care doctors to view their health data, such as medical records or lab results, patients tend to use more modern technologies, with online portal use at 35%, and email use at 14%.

### I. Doctor-patient communication today

**Base: Have Health Insurance and Primary Care Doctor**

Which of the following, if any, do you use to communicate with your primary care doctor for each of the following? Look at my current health data (e.g., medical records, lab results).

<table>
<thead>
<tr>
<th>Method</th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phone</td>
<td>22%</td>
<td>29%</td>
<td>21%</td>
<td>19%</td>
</tr>
<tr>
<td>In person</td>
<td>41%</td>
<td>44%</td>
<td>36%</td>
<td>44%</td>
</tr>
<tr>
<td>Portal</td>
<td>35%</td>
<td>32%</td>
<td>35%</td>
<td>36%</td>
</tr>
<tr>
<td>Email</td>
<td>14%</td>
<td>18%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>SMS/Text</td>
<td>2%</td>
<td>5%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Mail</td>
<td>10%</td>
<td>17%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Chat/IM</td>
<td>1%</td>
<td>3%</td>
<td>1%</td>
<td>*</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Not applicable</td>
<td>14%</td>
<td>16%</td>
<td>14%</td>
<td>12%</td>
</tr>
</tbody>
</table>

An asterisk (*) signifies a value of less than one-half percent.
A dash represents a value of zero.
Three in five American patients (60%) say they rely on their doctors to keep track of their health records. Twenty-nine percent of patients have access to single self-service portals provided by their healthcare and/or insurance providers. Another 28% still keep their records in a folder, shoebox, lockbox, drawer or other home-based physical storage method.

**I. Doctor-patient communication today**

**Base: Have Health Insurance and Primary Care Doctor**

How do you currently keep track of your health records?

- **Rely on my doctor**
  - Total: 60%
  - Millennials (18-34): 60%
  - Generation X (35-54): 56%
  - Baby Boomers (55+): 56%

- **I have access to a single self-service portal provided by my healthcare and/or insurance provider, where I can see my current health records**
  - Total: 29%
  - Millennials (18-34): 23%
  - Generation X (35-54): 29%
  - Baby Boomers (55+): 32%

- **I keep my records in a folder, shoebox, lockbox, drawer or other home-based physical storage option**
  - Total: 28%
  - Millennials (18-34): 24%
  - Generation X (35-54): 22%
  - Baby Boomers (55+): 36%

- **I use multiple portals or websites provided by my healthcare providers, specialists and insurance company where I can see my current health records**
  - Total: 16%
  - Millennials (18-34): 15%
  - Generation X (35-54): 13%
  - Baby Boomers (55+): 20%

- **I have my own electronic method (e.g. scanning, saving to desktop or online file storage)**
  - Total: 7%
  - Millennials (18-34): 5%
  - Generation X (35-54): 13%
  - Baby Boomers (55+): 6%

- **Other**
  - Total: 1%
  - Millennials (18-34): 1%
  - Generation X (35-54): 1%
  - Baby Boomers (55+): 1%

- **No one currently keeps track of my health records**
  - Total: 8%
  - Millennials (18-34): 12%
  - Generation X (35-54): 11%
  - Baby Boomers (55+): 4%
II. Communication between patients and insurance companies

Less than half of Americans with health insurance have contacted their health insurance company in the past year, according to the survey, primarily to ask about plan coverage (21%), find a provider (15%), check on authorization services (14%) and check the status of claims (14%). Interestingly, more than a quarter of millennials (ages 18-34) (26%) did so in order to find a healthcare provider, compared to just 7% of baby boomers (ages 55+).
Health insured Americans today communicate with their health insurance providers primarily through traditional channels. In fact, when it comes to asking about their bills, claim status, benefits coverage, or health issues, they use the phone (83%) or email (47%). However, nearly three quarters of health insured Americans (72%) say it’s important that their health insurance provider uses modern communication tools – such as a web portal, live chat/instant message and two-way video – for communicating.

How important is it that your health insurance provider uses modern tools for communicating (e.g., web portal, live chat/instant message, two-way video)?*

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Very/Somewhat important</strong></td>
<td>72%</td>
<td>81%</td>
<td>85%</td>
<td>75%</td>
</tr>
<tr>
<td><strong>Important</strong></td>
<td>65%</td>
<td>75%</td>
<td>81%</td>
<td>80%</td>
</tr>
<tr>
<td><strong>Somewhat important</strong></td>
<td>65%</td>
<td>75%</td>
<td>81%</td>
<td>80%</td>
</tr>
</tbody>
</table>

In what ways can you contact your health insurance provider when you have questions about your bills, claims status, benefits coverage or health issues?*

<table>
<thead>
<tr>
<th>Method</th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Phone</strong></td>
<td>83%</td>
<td>75%</td>
<td>81%</td>
<td>88%</td>
</tr>
<tr>
<td><strong>Email</strong></td>
<td>47%</td>
<td>46%</td>
<td>44%</td>
<td>49%</td>
</tr>
<tr>
<td><strong>Web/Online portal</strong></td>
<td>41%</td>
<td>37%</td>
<td>40%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Live chat/ Instant message</strong></td>
<td>13%</td>
<td>17%</td>
<td>12%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>SMS/Text</strong></td>
<td>6%</td>
<td>11%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Mail</strong></td>
<td>31%</td>
<td>28%</td>
<td>27%</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Video chat</strong></td>
<td>4%</td>
<td>6%</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>1%</td>
<td>-</td>
<td>1%</td>
<td>2%</td>
</tr>
</tbody>
</table>

*Base: Have Health Insurance

An asterisk (*) signifies a value of less than one-half percent.
A dash represents a value of zero.
Nearly three out of four patients (73%) have been prescribed medication in the past 12 months.

Base: Have Health Insurance and Primary Care Doctor
Which of the following have you been prescribed in the past 12 months?

- Prescription medication
  - Total: 73%
  - Millennials (18-34): 66%
  - Generation X (35-54): 65%
  - Baby Boomers (55+): 84%

- Physical therapy
  - Total: 13%
  - Millennials (18-34): 13%
  - Generation X (35-54): 13%
  - Baby Boomers (55+): 13%

- Medical device (e.g., pacemaker, insulin pump, aircast, electrotherapy units)
  - Total: 11%
  - Millennials (18-34): 5%
  - Generation X (35-54): 7%
  - Baby Boomers (55+): 7%

- Occupational therapy
  - Total: 23%
  - Millennials (18-34): 26%
  - Generation X (35-54): 26%
  - Baby Boomers (55+): 32%

- None of these
  - Total: 16%
  - Millennials (18-34): 4%
  - Generation X (35-54): 3%
  - Baby Boomers (55+): 1%
If patients who have been prescribed a medication in the past 12 months have a question, they primarily reach out to their pharmacists (73%) or their doctors (73%) for support.

### III. Pharma’s increasing role in patient outcomes

<table>
<thead>
<tr>
<th>Generation</th>
<th>Pharmacist</th>
<th>Doctor</th>
<th>Online resources (e.g., online search, healthcare clinics)</th>
<th>The prescription bottle</th>
<th>The drug company (e.g., website, phone call, pamphlet)</th>
<th>Family/friends</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>73%</td>
<td>73%</td>
<td>43%</td>
<td>28%</td>
<td>9%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Millennials (18-34)</td>
<td>77%</td>
<td>69%</td>
<td>35%</td>
<td>24%</td>
<td>10%</td>
<td>3%</td>
<td>*</td>
</tr>
<tr>
<td>Generation X (35-54)</td>
<td>76%</td>
<td>67%</td>
<td>28%</td>
<td>22%</td>
<td>7%</td>
<td>5%</td>
<td>-</td>
</tr>
<tr>
<td>Baby Boomers (55+)</td>
<td>77%</td>
<td>67%</td>
<td>28%</td>
<td>23%</td>
<td>10%</td>
<td>2%</td>
<td>-</td>
</tr>
</tbody>
</table>

A dash represents a value of zero.

Base: Prescribed prescription medication in past 12 months
If you have a question about your prescription medication whom would you reach out to/where would you look for support? Select all that apply.
As the healthcare industry rotates toward improving patient outcomes, pharmaceutical companies are also working to improve direct communication with patients. Interestingly, 72% of Americans agree that they would choose drugs from a pharmaceutical company that is engaged in their outcome vs. one that is not.

Three in five Americans (60%) are open to virtual support service options (e.g., video conference call) with pharmaceutical companies to help them understand their medications, particularly millennials (70%).

### III. Pharma’s increasing role in patient outcomes

**How much do you agree or disagree with the following statements? - Summary of Strongly/Somewhat agree**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would choose pharmaceutical drugs from a pharmaceutical company that is engaged in my outcome over one that is not.</td>
<td>72%</td>
<td>77%</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>I would be open to virtual support service options (e.g., video conference call) with pharmaceutical company to help me understand my medications.</td>
<td>60%</td>
<td>64%</td>
<td>60%</td>
<td>64%</td>
</tr>
<tr>
<td>Makers of pharmaceutical drugs should play an active role in helping me manage my health.</td>
<td>50%</td>
<td>58%</td>
<td>47%</td>
<td>47%</td>
</tr>
</tbody>
</table>

### Which of the following offerings would make you more willing to ask your healthcare provider for a specific brand of medication?

<table>
<thead>
<tr>
<th>Offering</th>
<th>Total</th>
<th>Millennials (18-34)</th>
<th>Generation X (35-54)</th>
<th>Baby Boomers (55+)</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the pharmaceutical company that made the medication offered an online patient portal for support and advice.</td>
<td>30%</td>
<td>37%</td>
<td>23%</td>
<td>34%</td>
</tr>
<tr>
<td>If the pharmaceutical company that made the medication offered an online community with other people taking the medication.</td>
<td>20%</td>
<td>28%</td>
<td>12%</td>
<td>22%</td>
</tr>
<tr>
<td>If the pharma company that made the medication offered virtual assistance (e.g., two-way video conferencing, live chat).</td>
<td>13%</td>
<td>15%</td>
<td>7%</td>
<td>13%</td>
</tr>
<tr>
<td>None of these</td>
<td>44%</td>
<td>58%</td>
<td>47%</td>
<td>52%</td>
</tr>
</tbody>
</table>

*Base: All Respondents*
In addition, more than four in five Americans (83%), and 88% of millennials, would share their experiences and direct feedback about a medication with a pharmaceutical company to help improve their ability to develop and support new medications.

### III. Pharma’s increasing role in patient outcomes

**Base: All Respondents**

Which of the following would make you likely to share your experiences and direct feedback about a medication with a pharmaceutical company to help improve their ability to develop and support new medications?

- **Would share experiences/feedback (net)**
  - Total: 83%
  - Millennials (18-34): 88%
  - Generation X (35-54): 82%
  - Baby Boomers (55+): 81%

- **Free medication**
  - Total: 41%
  - Millennials (18-34): 50%
  - Generation X (35-54): 42%
  - Baby Boomers (55+): 33%

- **Discount on medication**
  - Total: 38%
  - Millennials (18-34): 49%
  - Generation X (35-54): 49%
  - Baby Boomers (55+): 31%

- **Nothing - I would provide my experiences and feedback regardless.**
  - Total: 29%
  - Millennials (18-34): 25%
  - Generation X (35-54): 24%
  - Baby Boomers (55+): 37%

- **Something else**
  - Total: 6%
  - Millennials (18-34): 4%
  - Generation X (35-54): 8%
  - Baby Boomers (55+): 5%
IV. AI in health causes optimism and concern

Enthusiasm for the potential applications of artificial intelligence in healthcare varies by generation, with a majority of millennials (59%), indicating that they are excited about the potential of AI to positively affect healthcare, compared to 33% of baby boomers.

When asked about currently available AI applications, baby boomers (28%) were significantly less likely than millennials (63%) to agree that they would be interested in a digital assistant to recommend personalized healthy habits, similar to how retailers recommend things to buy based on purchase history.

Base: All Respondents
How much do you agree or disagree with the following statements? Summary of Strongly/Somewhat Agree

- I would like my healthcare provider to offer digital assistants to help me check benefits.
  - Total: 53%, Millennials (18-34): 61%, Generation X (35-54): 41%

- I would like my healthcare provider to offer digital assistants to help me book appointments.
  - Total: 50%, Millennials (18-34): 58%, Generation X (35-54): 38%

- I am excited about the potential of AI (i.e., Artificial Intelligence) to positively affect healthcare.
  - Total: 45%, Millennials (18-34): 47%, Generation X (35-54): 33%

- I would be interested in a digital assistant to recommend personalized healthy habits, similar to how retailers recommend things to buy based on purchase history.
  - Total: 43%, Millennials (18-34): 63%, Generation X (35-54): 45%, Baby Boomers (55+): 28%

- I would like my healthcare provider to offer digital assistants to recommend treatments and medication.
IV. AI in health causes optimism and concern

Of the baby boomers that are excited about the potential of AI in healthcare, 70% say the reason is it can give doctors more time to focus on their health, such as taking care of more administrative tasks so they have more time to be with patients.
Among baby boomers that are concerned about the impact of AI on healthcare, 74% are worried about AI providing an incorrect diagnosis that is used over a doctor’s recommendation – something only 60% of millennials are worried about.

IV. AI in health causes optimism and concern

Base: Worried about AI impact on healthcare
Which of the following are reasons why you are worried about the potential of AI (i.e., Artificial Intelligence) to negatively affect healthcare? Please select all that apply.

- Worried about AI being wrong (e.g., they provide the wrong diagnosis and that is chosen over a doctor’s recommendation)
- Less “human touch” in interactions
- Worried about my data being used incorrectly
- Other

- Total
- Millennials (18-34)
- Generation X (35-54)
- Baby Boomers (55+)

67% 60% 66% 74%
66% 63% 66% 68%
65% 63% 63% 69%
3% 5% 5% 8%
V. Research Methodology

This survey was conducted online within the United States by Harris Poll on behalf of Salesforce from May 4-8, 2017, among 2,083 U.S. adults ages 18 and older, among whom 1,893 have health insurance and 1,785 are "patients." This online survey is not based on a probability sample and therefore no estimate of theoretical sampling error can be calculated. For complete survey methodology, including weighting variables, please contact Joel Steinfeld at jsteinfeld@salesforce.com.