

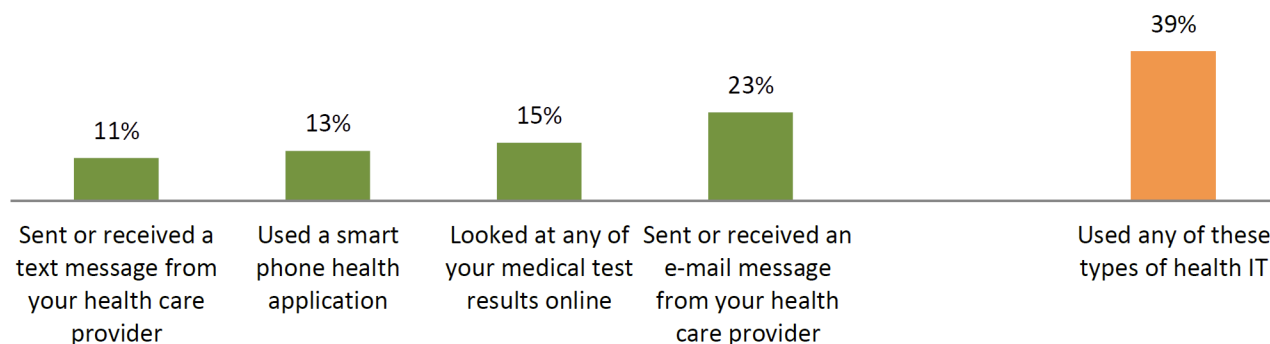
## Disparities in Individuals' Access and Use of Health IT in 2013

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A number of national policies, initiatives and regulations have been implemented in the past year to increase all patients' access to and use of their electronic health information (1, 2, 3, 4, 5). These include Meaningful Use Stage 2 (MU2) patient electronic access rules, changes to the Clinical Laboratory Improvement Amendments (CLIA) to enable patients' direct access to their test results from laboratories, and the expansion of the Blue Button Initiative. This brief presents national data from 2013, prior to the implementation of these efforts to expand online access and use of electronic health information, regarding individuals' use of certain types of health IT. The brief also explores variation in individuals' access and use of certain types of health IT by socio-demographic characteristics, geography and providers' use of an electronic health record (EHR) to identify potential disparities.

### Approximately 4 in 10 individuals used some type of health IT in 2013.

Figure 1: Proportion of individuals who report using selected types of health IT in 2013.



Notes: \*Significantly different from prior year (p<.05)

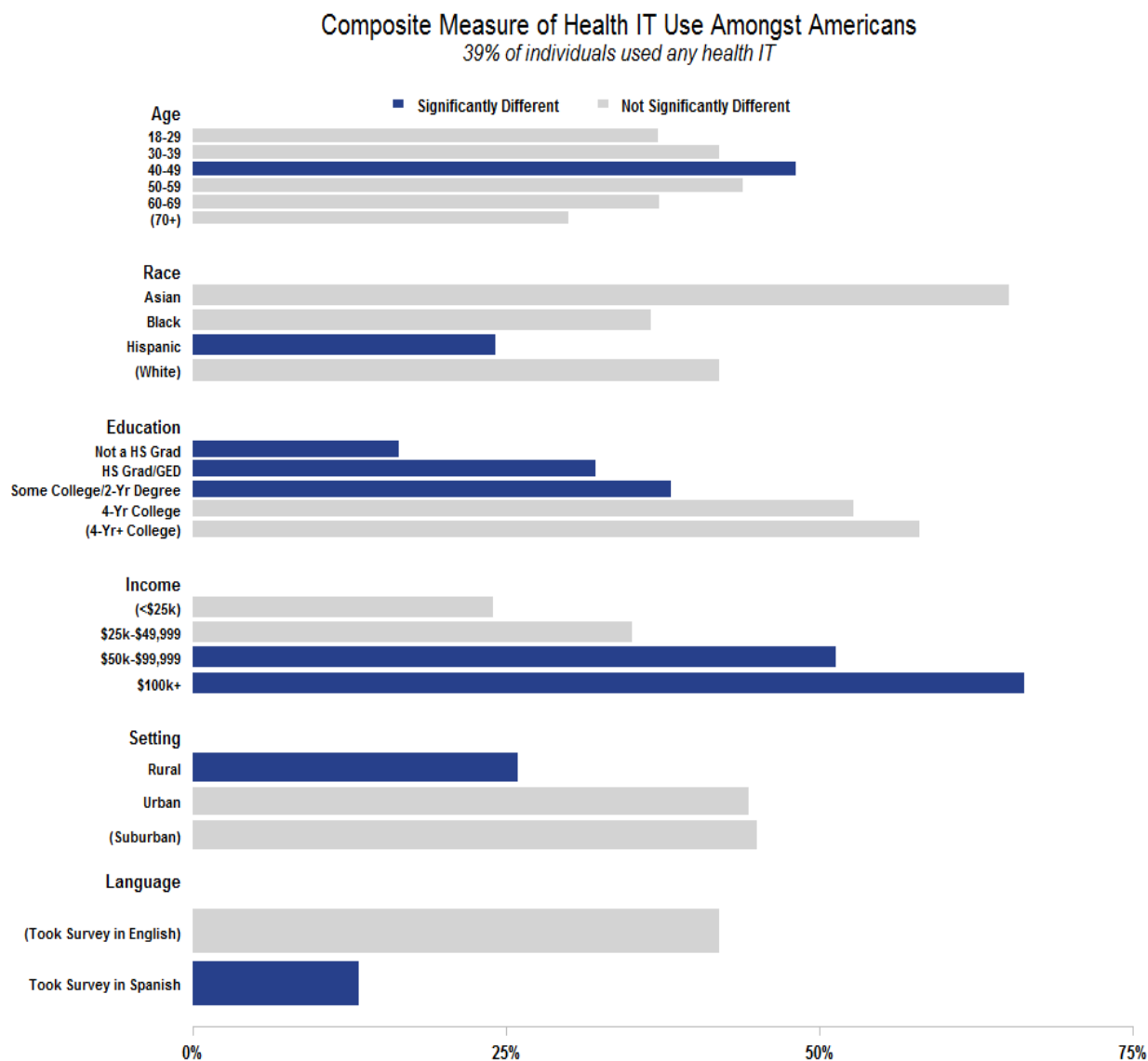
SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

- ★ Communicating with health care providers electronically was the most common form of health IT activity, with approximately one-quarter of individuals e-mailing their health care provider and over one in ten text-messaging their health care provider.
- ★ Less commonly reported uses of health IT included looking at test results online (15%) and using smart phone health applications (13%).



## In 2013, disparities in health IT use existed across a variety of socio-demographic characteristics and geographic areas.

Figure 2: Percent of individuals who used certain types of health IT by various characteristics, 2013.



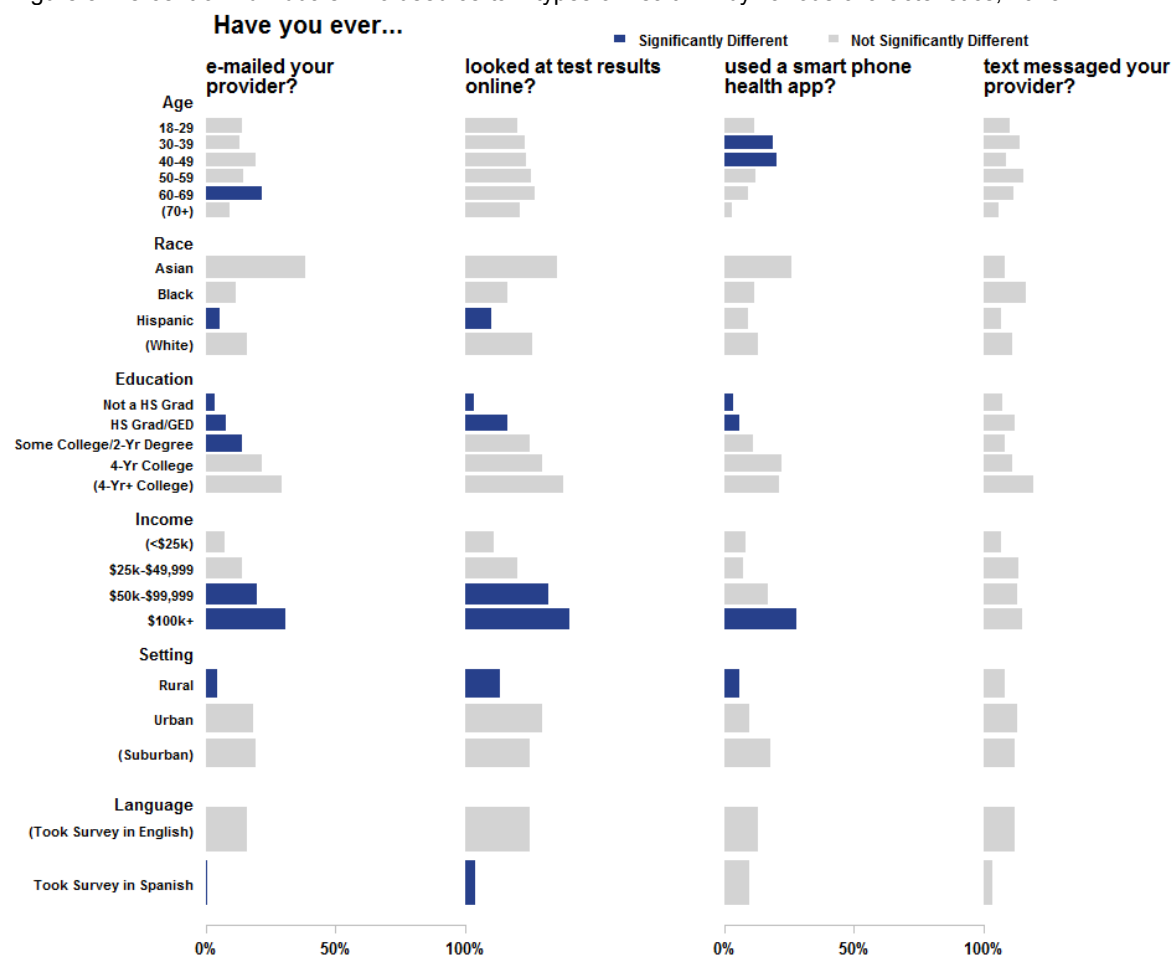
NOTE: Significant differences among respondent categories reflect unadjusted comparisons to reference category, indicated by parentheses ( ). No differences were found by gender or chronic condition. See Appendix Table 1 for values.

SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

- ★ In 2013, health IT use was significantly higher among individuals aged 40-49 years and individuals with annual household incomes greater than \$50,000.
- ★ In 2013, health IT use was significantly lower among individuals of Hispanic race/ethnicity, who took the survey in Spanish, individuals with less than a 4 year college degree, and those who lived in rural settings.

## Disparities varied by type of health IT in 2013, with few disparities evident in text messaging of health care providers.

Figure 3: Percent of individuals who used certain types of health IT by various characteristics, 2013.



NOTE: Significant differences among respondent categories reflect unadjusted comparisons to reference category, indicated by parentheses ( ). No differences were found by gender or chronic condition. See Appendix Table 1 for values.

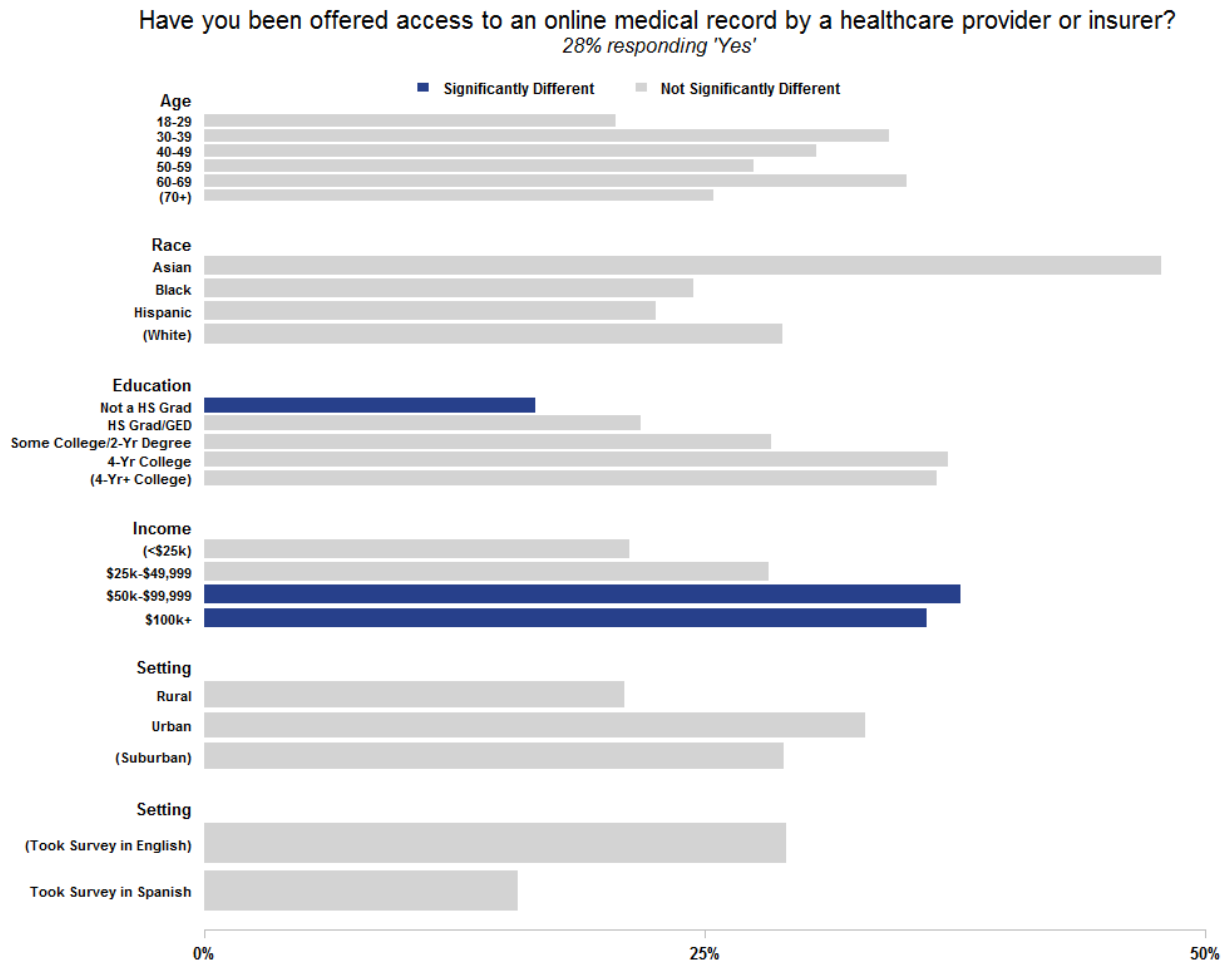
SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ We found no significant differences across socio-demographic characteristics or setting in text messaging health care providers; whereas emailing health care providers, looking at test results online and smart phone health app use varied significantly by education, income and setting.
- ★ Consistent patterns did not emerge in use of different types of health IT by age. Individuals aged 60 to 69 years old had significantly higher rates of emailing providers while individuals between the ages of 30 and 49 years old had significantly higher rates of using smart phone health apps. Viewing online test results and text messaging did not vary by age.
- ★ Individuals who took the survey in Spanish and Hispanics had significantly lower rates of emailing their health care provider and viewing their test results online, whereas smart phone health apps use or text messaging health care providers did not vary by race/ethnicity or by whether the survey was taken in English or Spanish.



## In 2013, individuals' online access to their medical information varied by income and education but did not vary by age, race or setting.

Figure 4: Proportion of individuals nationwide who have been offered access to an online medical record by a health care provider or insurer, 2013.



NOTE: Significant differences among respondent categories reflect unadjusted comparisons to reference category, indicated by parentheses ( ). No differences were found by gender or chronic condition. See Appendix Table 2 for values.

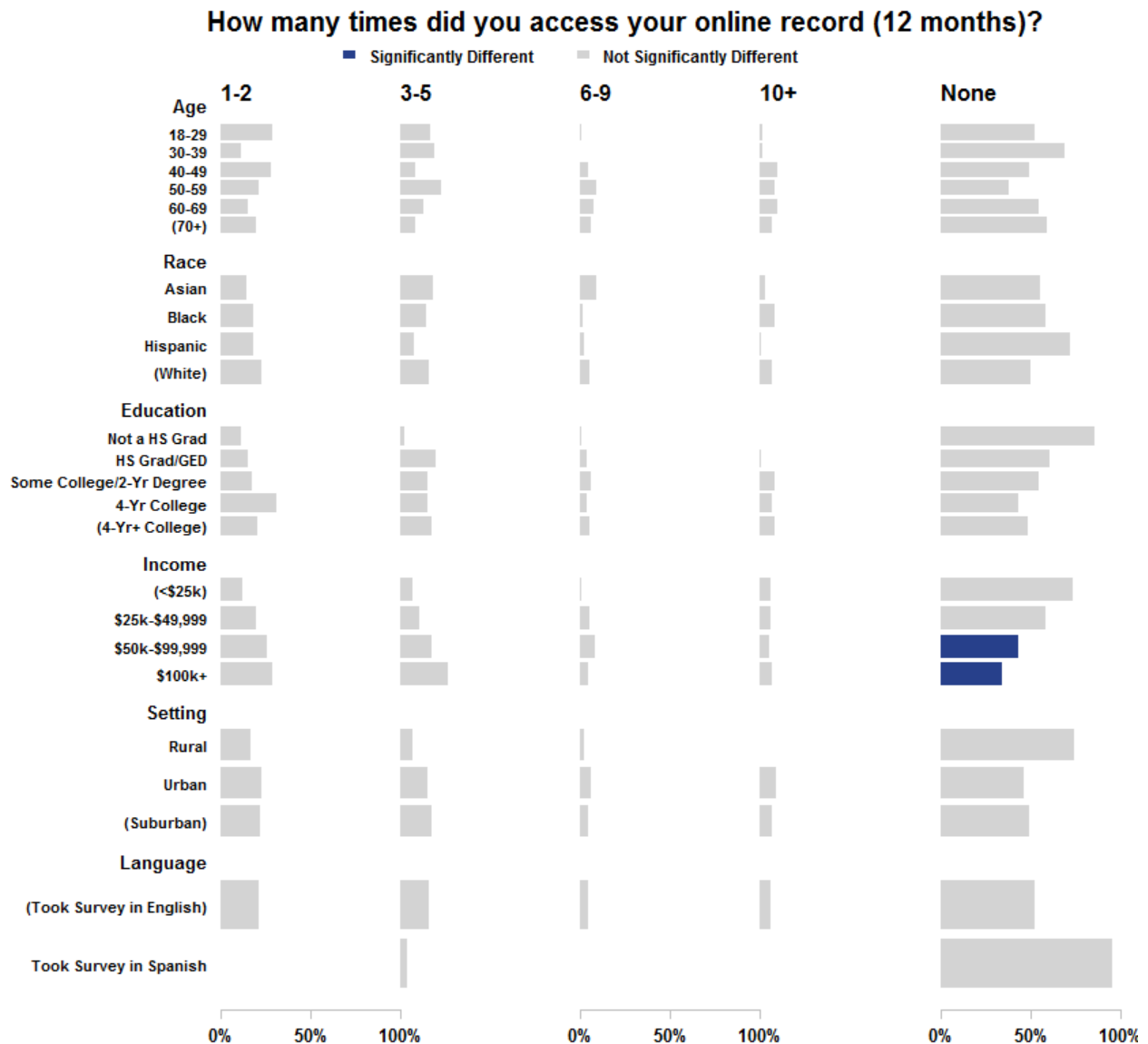
SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

- ★ Individuals who did not graduate from high school had significantly lower rates of being offered online access compared to individuals with more than a college degree.
- ★ Individuals with household incomes greater than \$50,000 had significantly higher rates of being offered online access compared to individuals who reported less income.
- ★ There were no significant differences who were offered online by age, race/ethnicity or setting.



## Once individuals gained online access, use of online records largely did not vary across individuals.

Figure 5: Frequency of using online record by demographic characteristics and setting, 2013



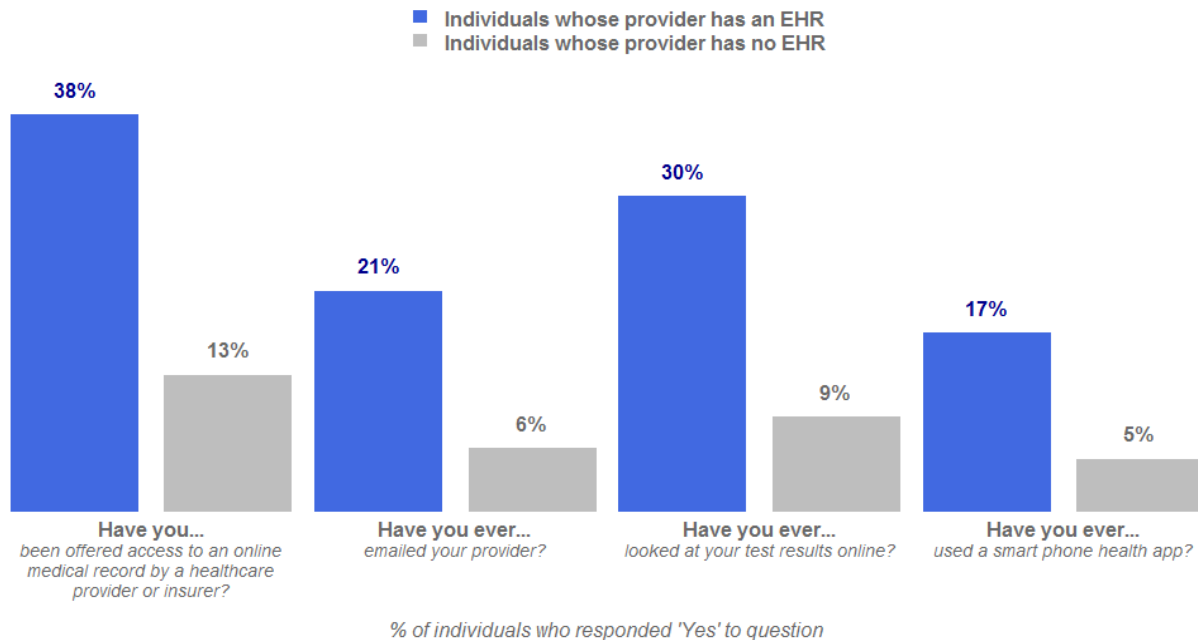
**Note:** Significant differences among respondent categories reflect unadjusted comparisons to reference category. No significant differences by chronic disease or gender. See appendix Table 2 for values.

**SOURCE:** 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

- ★ There were no significant differences in use of online medical records by age, race/ethnicity, education or setting in 2013.
- ★ Individuals who had household incomes greater than \$50,000 had significantly lower rates of not accessing their online medical record.

## Individuals with providers who used EHRs had higher rates of online access and usage of certain types of health IT.

Figure 6: Percent of individuals who can access and use health IT by whether or not the individual's provider has an EHR, 2013



Note: All differences between individuals whose provider has an EHR and has no EHR are statistically significant ( $p < 0.05$ ).  
SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

- ★ Close to 4 in 10 individuals whose provider had an EHR were offered access to an online medical record by a health insurer or health care provider compared about one in ten individuals whose provider had a paper-based medical record.
- ★ Compared to individuals whose provider had a paper medical record, individuals whose provider had an EHR had over 3 times the rate of emailing their health care provider, looking at test results online and using a smart phone health app.



## Summary

Use of health IT by consumers has the potential to improve individuals' health and well-being (6). In 2013, approximately 4 in 10 individuals used some type of health IT, with most of health IT use focused on communicating with health care providers via e-mail or text messaging. Measuring disparities in access and use of health IT across the U.S. population is critical to ensuring that we are able to realize the full potential of these benefits. We found that disparities in health IT use varied by type of health IT.

Disparities exist in use of smart phone health apps, emailing providers and looking up test results online. Individuals with lower incomes, less education and those who lived in rural settings had significantly lower levels of use of smart phone health apps, emailing their health care providers or looking up test results online. Individuals of Hispanic race/ethnicity had significantly lower rates of looking up test results online and emailing their health care provider compared to White non-Hispanics. These differences may partially be related to language barriers; we found that individuals who took the survey in Spanish had lower rates of looking up test results online and emailing their provider.

Other forms of health IT showed less evidence of disparities. In contrast to other types of health IT, we found no disparities in text-messaging health care providers. This may be in part due to the widespread availability and use of phones with text-messaging capability and the lack of reliance on broadband Internet access. However, text messaging is inherently not a secure means of communication compared to secure messaging. Socio-economic differences were evident in online access to medical records; however, online access did not vary by other factors such as age, setting, or race/ethnicity. Furthermore, once individuals were provided with access, usage of the online medical record largely did not vary by socioeconomic characteristics or setting.

Individuals' access and use of certain forms of health IT are dependent upon providers' adoption of technology with these capabilities (7,8). These findings provide evidence that providers' adoption of EHRs may enhance individuals' access and use of certain types of health IT. Rates of online access to medical records and rates of emailing health care providers, looking up test results online and use of smartphone health apps were approximately 3 times higher among individuals who reported their healthcare provider had adopted an EHR.

Although we were unable to examine this, health IT access and use may be affected by other factors such as health insurance coverage and broadband access. Continuing to further examine and monitor trends in health IT access and usage will be critical to assess how these disparities evolve over time, particularly with the implementation of key policies designed to improve patient access to their medical information.



## Definitions

**Online medical record:** The survey defined this as: “Some patients can access information from their medical records online—that is, through the Internet—on secure websites set up for this purpose. By going to the secure website, patients can view parts of their own medical record, download the information, or send it somewhere else.”

## Data Source and Methods

Data are from The Office of the National Coordinator for Health Information Technology’s (ONC) Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange. The survey was conducted by NORC at the University of Chicago with MITRE.

The respondent universe for the survey was the civilian, non-institutionalized population ages 18 years old and older within the 50 states and the District of Columbia. This survey utilized a dual random digit dialing (RDD) frame of landline phone numbers and wireless/mobile phone numbers developed by Survey Sampling International (SSI). In order to reduce sampling variability and to represent the nation, NORC stratified the landline RDD frame by Census Region. The 2013 survey oversampled Hispanic, Asian and Black populations. From each household with a selected phone number in a given frame only one adult was selected to complete the telephone interview. The survey utilized the last-birthday respondent-selection method, asking for the eligible person (adult at least 18 years old) within the sampling unit (i.e., household) who had the most recent birthday or would have the next birthday. This method provided a true within-unit probability sample without intrusive or burdensome screening of eligible persons in the household and ensured maximum respondent anonymity, as no identifying information was collected. A total of 2,107 surveys were completed, with an interview completion rate of 41% and a response rate of 21% (calculated based upon the Council of American Survey Research Organizations method). Data presented in this data brief are weighted national estimates.



Appendix Table 1. Variation in Health IT use in 2013

	Use of any health IT	Looked at test results online	Emailed provider	Text messaged provider	Used smart phone health app
<b>Overall across population</b>	<b>39%</b>	<b>15%</b>	<b>23%</b>	<b>11%</b>	<b>13%</b>
<b>Age</b>					
18-29	37%	14%	20%	10%	12%
30-39	42%	13%	23%	14%	19%
40-49	48%	19%	24%	9%	20%
50-59	44%	14%	26%	15%	12%
60-69	37%	21%	27%	12%	9%
(70+)	30%	9%	21%	6%	3%
<b>Race/Ethnicity</b>					
(White)	42%	16%	26%	11%	13%
Hispanic	24%	5%	10%	7%	9%
Asian	65%	38%	36%	8%	26%
Black	37%	12%	16%	16%	12%
<b>Education</b>					
(4-Yr+ College)	58%	29%	38%	19%	21%
4-Yr College	53%	22%	30%	11%	22%
Some College/2-Yr Degree	38%	14%	25%	8%	11%
HS Grad/GED	32%	7%	16%	12%	6%
Not a HS Grad	16%	4%	3%	7%	3%
<b>Income</b>					
\$100k+	66%	30%	40%	15%	28%
\$50k-\$99,999	51%	20%	32%	13%	17%
\$25k-\$49,999	35%	14%	20%	14%	7%
(<\$25k)	24%	7%	11%	7%	8%
<b>Language</b>					
Took Survey in Spanish	13%	0%	4%	4%	10%
(Took Survey in English)	42%	16%	25%	12%	13%
<b>Setting</b>					
Rural	26%	5%	14%	8%	6%
Urban	44%	18%	30%	13%	9%
(Suburban)	45%	19%	25%	12%	18%

Note: Values in red text indicate statistically significantly different ( $p < 0.05$ ) from reference category, listed in ( ) parentheses.  
 SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

Appendix Table 2. Variation in Online Access and Frequency of Use in 2013

	Provided online access	Did not access online record	Accessed online record 1 to 2 times	Accessed online record 3 to 5 times	Accessed online record 6 to 9 times	Accessed online record 10 or more times
<b>Overall across population</b>	28%	54%	21%	15%	4%	6%
<b>Age</b>						
18-29	21%	52%	29%	17%	1%	1%
30-39	34%	69%	11%	19%	0%	1%
40-49	31%	50%	28%	8%	5%	9%
50-59	27%	38%	21%	23%	9%	8%
60-69	35%	55%	16%	13%	7%	10%
(70+)	25%	59%	20%	9%	6%	6%
<b>Race/Ethnicity</b>						
(White)	29%	50%	23%	16%	5%	7%
Hispanic	23%	72%	18%	8%	2%	0%
Asian	48%	56%	14%	18%	9%	2%
Black	24%	58%	19%	14%	1%	8%
<b>Education</b>						
(4-Yr+ College)	37%	48%	21%	17%	5%	8%
4-Yr College	37%	44%	31%	15%	4%	6%
Some College/2-Yr Degree	28%	54%	17%	15%	6%	8%
HS Grad/GED	22%	61%	15%	20%	4%	0%
Not a HS Grad	17%	86%	12%	2%	0%	0%
<b>Income</b>						
\$100k+	36%	34%	29%	26%	4%	6%
\$50k-\$99,999	38%	44%	26%	17%	8%	5%
\$25k-\$49,999	28%	58%	20%	11%	5%	6%
(<\$25k)	21%	74%	12%	7%	1%	6%
<b>Language</b>						
Took Survey in Spanish	16%	96%	0%	4%	0%	0%
(Took Survey in English)	29%	52%	22%	16%	5%	6%
<b>Setting</b>						
Rural	21%	74%	17%	7%	2%	0%
Urban	33%	47%	23%	15%	6%	9%
(Suburban)	29%	50%	22%	17%	5%	6%

Note: Values in red text indicate statistically significantly different ( $p < 0.05$ ) from reference category, listed in ( ) parentheses.  
 SOURCE: 2013 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.



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## About the Authors

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