



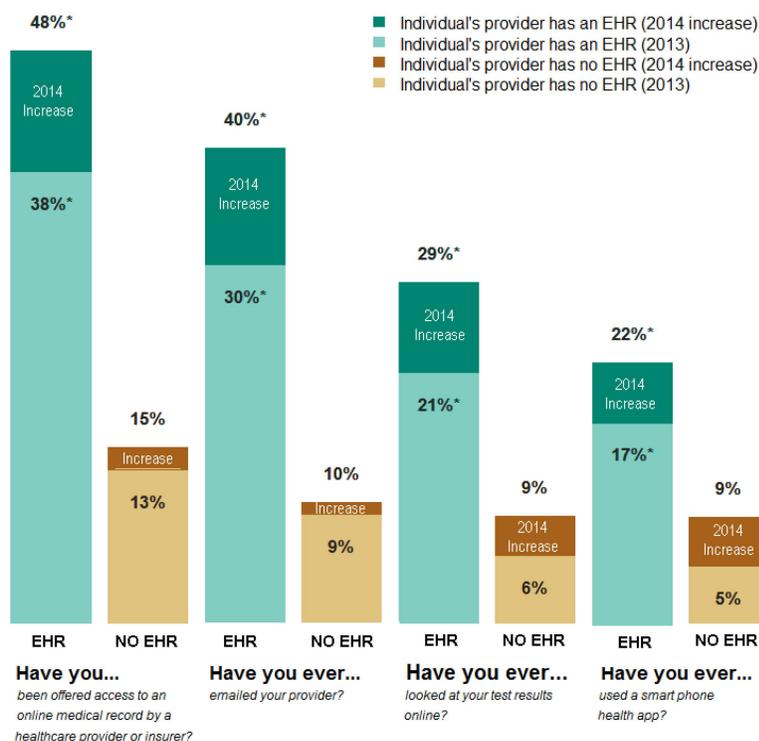
Disparities in Individuals' Access and Use of Health Information Technology in 2014

Vaishali Patel, PhD MPH, Wesley Barker, MS, Erin Siminerio, MPH

Findings from nationally representative surveys show that individuals' use of information technology (IT) for health needs increased significantly between 2013 and 2014 (1). The percentage of individuals offered online access to their medical record also grew by over one-third to nearly 4 in 10 individuals in 2014 (2). Prior analysis revealed that disparities in online access of medical records and use of IT for health-related needs existed by certain socio-demographic characteristics and geographic settings in 2013 (3). This data brief examines 2014 data to identify disparities in online access to medical records and use of IT for health needs.

Individuals whose provider had an EHR were offered online access to their medical record at three times the rate of those whose provider does not.

Figure 1: Percent of individuals who have been offered access to an online medical record and use certain types of IT for health related needs by whether or not the individual's provider has an EHR, 2014



NOTE: *Significant differences among individuals whose provider has versus does not have an EHR (p<0.05), comparisons within same year. SOURCE: 2013-2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange.

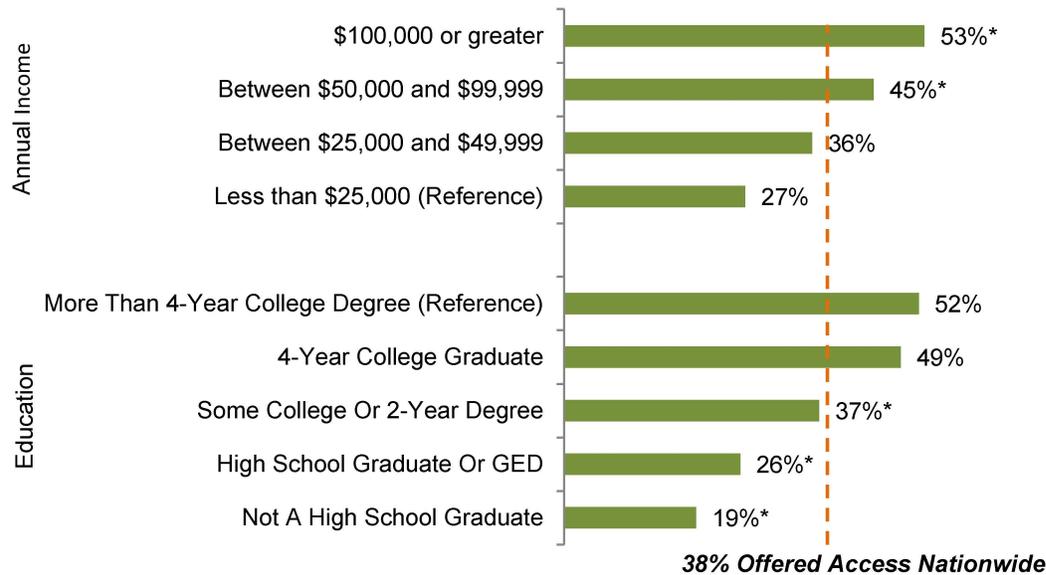
★ In 2014, individuals whose provider had an EHR had significantly higher rates of using IT for health needs compared to individuals whose provider did not have an EHR.



- ★ The percent of individuals offered access to online medical records, emailing providers, and looking up test results online increased between 2013 and 2014; however, the rate of increase was greater among those whose provider had an EHR.

Individuals with lower incomes and less education had significantly lower rates of being offered online access to their health information.

Figure 2: Percentage of individuals offered online access to a medical record by a health insurer or health care provider by annual household income and education, 2014



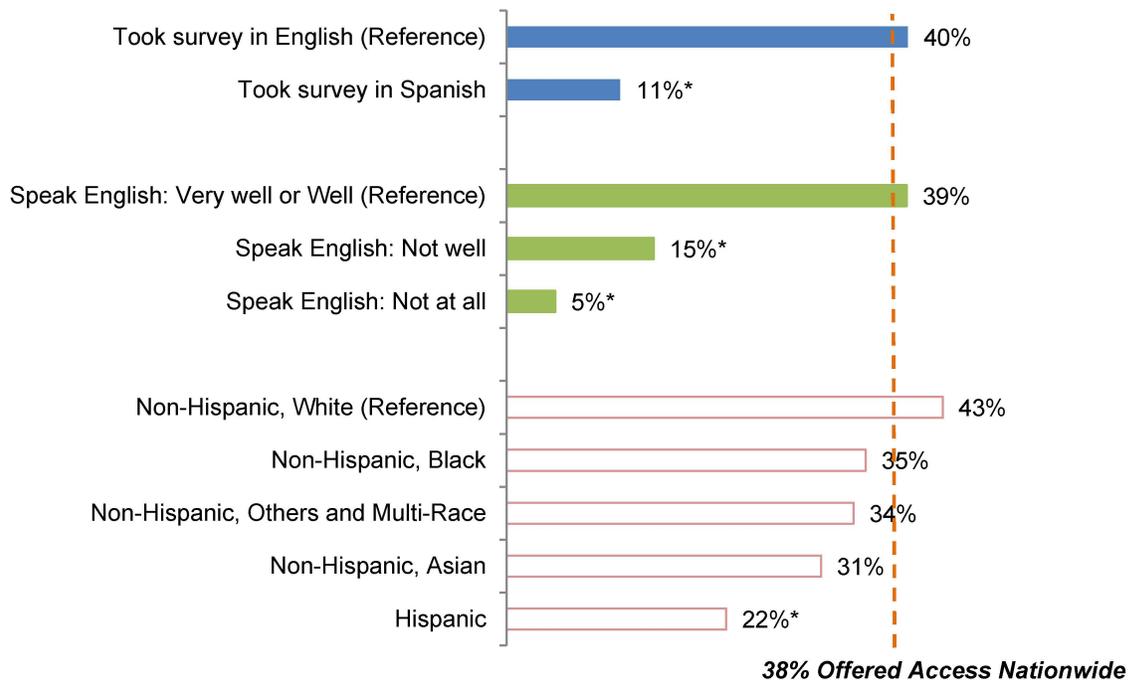
NOTE: *Significantly different from reference category ($p < 0.05$). No significant differences were found by age, setting (e.g., rural vs. urban), chronic health condition, or disability. See [Appendix Table 1](#) for variation in being offered online access to medical record.
SOURCE: 2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ While about half of individuals with incomes of \$100,000 or more were offered online access to their health information, only about one-quarter of individuals with less than a \$25,000 annual income were offered online access.
- ★ Individuals with more than a four year college degree were offered online access at about twice the rate as individuals who had a high school degree or less.



Individuals who had difficulty speaking English were offered online access to their medical records at significantly lower rates.

Figure 3: Percentage of individuals who were offered online access to their medical record by a health insurer or health care provider by language and race/ethnicity, 2014.



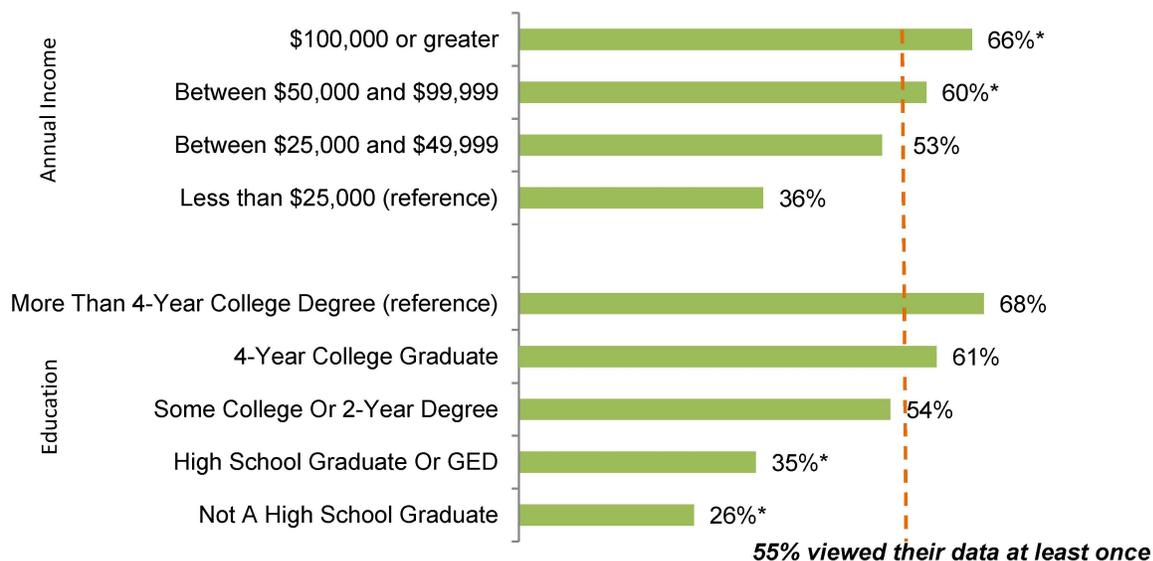
NOTE: *Significantly different from reference category ($p < .05$). See [Appendix Table 1](#) for variation in being offered online access to medical record.
SOURCE: 2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ While 39% of individuals who spoke English very well or well were offered online access to their medical record, only 15% of individuals who didn't speak English well and only 5% of those who didn't speak English at all were offered online access to their medical record.
- ★ Forty percent of individuals who took the survey in English were offered online access to their medical record compared to 11% of individuals who took the survey in Spanish.
- ★ Almost twice as many white, non-Hispanic individuals were offered online access to their medical record as compared to Hispanic individuals.



Among individuals offered online access to their medical record, those with higher incomes and more education were more likely to view their record.

Figure 4: Among individuals who were offered online access to their medical record by a health care provider or health insurer, the percentage who viewed their online medical record at least once within the last year by annual household income and education, 2014.



Notes: *Significantly different compared to reference category ($p < 0.001$). No significant differences were found by demographic characteristics (e.g., age, gender), race, language, setting (e.g., rural vs. urban), chronic health condition, or disability. See [Appendix Table 1](#) for variation in rates of viewing online medical record.

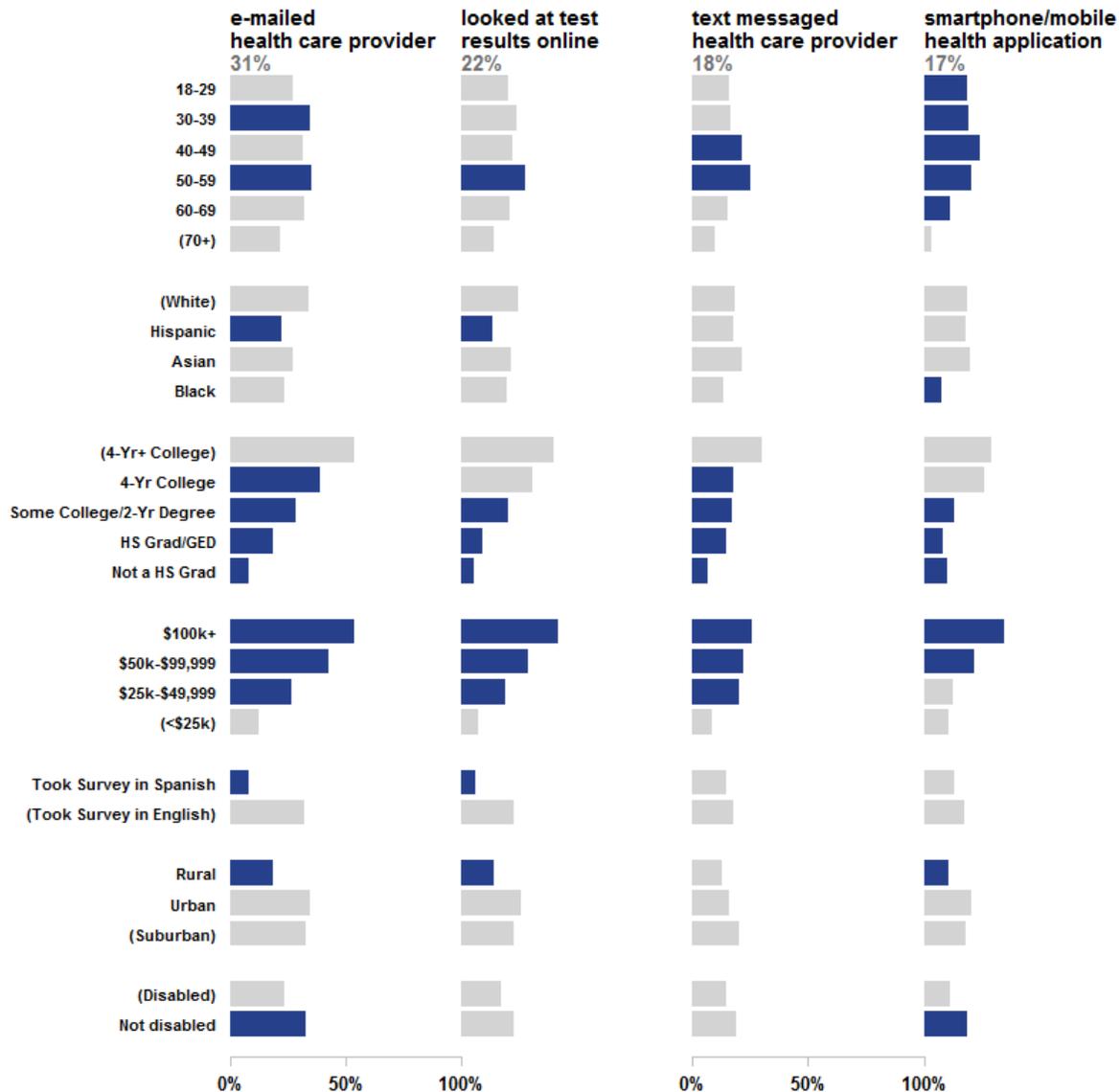
SOURCE: 2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ Individuals with annual incomes of at least \$50,000 had significantly higher rates of viewing their online medical record compared to individuals with incomes less than \$25,000.
- ★ While almost two-thirds of individuals with annual incomes higher than \$100,000 viewed their online medical record at least once within the past year, only about one-third of individuals with incomes less than \$25,000 viewed their record within the past year.
- ★ Individuals with a high school degree or less had significantly lower rates of viewing their online medical record compared to individuals with more than a four-year college degree.
- ★ Individuals with a four-year college degree or more education were over twice as likely to view their online medical record compared to those without a high school degree.



Individuals with more education and higher income use certain types of IT for health-related needs at significantly higher rates

Figure 5: Percentage of individuals who have ever used certain types of IT for health-related needs by various characteristics (significant differences shaded dark).



NOTE: Significant differences among respondent categories reflect unadjusted comparisons to reference category, indicated by parentheses (). See [Appendix Table 2](#) for values. Measurement of disability is based upon a composite measure (see [Definitions](#)).
 SOURCE: 2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ Individuals 50-59 years of age had significantly higher rates of text-messaging and emailing their provider, looking up online test results, and using a mobile health application compared to individuals 70 years or older.
- ★ Individuals with no disabilities had significantly higher rates of emailing their provider and using a mobile health application than individuals with a disability.
- ★ Individuals residing in rural areas have significantly lower rates of emailing their provider, looking up test results online and using a smart phone health application compared to individuals residing in suburban settings.



Summary

Although rates of individuals offered online access and use of certain types of information technology grew significantly between 2013 and 2014, disparities remain. This data brief's findings suggest that individuals' access to their online medical record and their use of IT to address their health care needs varies significantly across socio-demographic characteristics and by geographic setting in 2014.

Individuals with less income or education had lower rates of access to and use of their online medical record. These individuals also had lower rates of using certain types of IT to address their health care needs, such as emailing or text messaging their health care provider and using a smart phone health application.

Findings from this data brief also suggest that language barriers may impede access to online medical records and use of health IT. Individuals who did not speak English well or took the survey in Spanish were significantly less likely to be offered access to their online medical record. Individuals who took the survey in Spanish also had significantly lower rates of emailing their health care provider or looking up test results online.

There were no differences in rates of access to or the viewing of an online medical record by age. However, individuals 50 to 59 years of age had significantly higher rates of emailing or text-messaging health care providers, looking up test results online, and using smartphone health applications compared to individuals 70 years or older.

Individuals' electronic access their personal health information and use of IT for health differed by whether their provider had an EHR. In both 2013 and 2014, individuals whose health care providers used EHRs had significantly higher rates of being offered online access to their medical record and using IT for health-related needs compared to those who did not. Hospitals' and physicians' adoption of computerized functionality to support individuals' online access to medical records also grew significantly over this same time period, and this may be reflected in the consumer data (4,5). Increased use of these online capabilities by providers may also drive increased use by consumers.

ONC intends to continue monitoring patient access to their electronic health information. ONC is collaborating with the National Cancer Institute and the National Partnership for Women and Families on future rounds of Health Information National Trends Survey, a nationally representative survey of individuals to monitor health IT access and use (6). This will allow ONC to continue examining variation in health IT access and use to identify disparities and factors that enable greater access and use of health IT.



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.”

Disability: Individuals who responded “yes” to one or more of the following items:

- Are you deaf or do you have serious difficulty hearing?
- Are you blind or do you have serious difficulty seeing, even when wearing glasses?
- Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?

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, and the 2012 and 2014 oversampled for Hispanic and Black populations. A total of 2,123 were completed in 2014; 2,107 surveys were completed in 2013; and 2,050 surveys were completed in 2012. Data presented in this data brief are weighted national estimates. Bivariate, unadjusted analyses were conducted across groups.

New survey data will not be available in 2015. ONC is collaborating with the National Cancer Institute on future rounds of their nationally representative Health Information Trends Survey to monitor health IT access and use. For more information regarding HINTS please go to <http://hints.cancer.gov/about.aspx>.



Appendix Table 1. Rates of Access and Use of Online Medical Records by Select Characteristics, 2014 ([†] items in bolded italic green font are significantly different from reference category, p<0.05)

Category		<i>Offered electronic access to your health information by health insurer/provider</i>	<i>Viewed medical record at least once within last year (among those who were offered access)</i>
	National Estimate	38%	55%
Demographics			
Sex			
	*Male	32%	53%
	Female	43%[†]	56%
Age			
	18 to 29 years	34%	58%
	30 to 39 years	43%	57%
	40 to 49 years	40%	57%
	50 to 59 years	39%	62%
	60 to 69 years	40%	48%
	*70 years or older	34%	40%
Race/Ethnicity/Hispanic Origin			
	Hispanic	22%[†]	54%
	Non-Hispanic, Asian	31%	84%
	Non-Hispanic, Black	35%	61%
	*Non-Hispanic, White	43%	53%
	Non-Hispanic, Others and Multi-Race	34%	34%
Education			
	Not A High School Graduate	19%[†]	26%[†]
	High School Graduate Or GED	26%[†]	35%[†]
	Some College Or 2-Year Degree	37%[†]	54%
	4-Year College Graduate	49%	61%
	*More Than 4-Year College Degree	52%	68%
Income			
	*Less than \$25,000	27%	36%
	Between \$25,000 and \$49,999	36%	53%
	Between \$50,000 and \$99,999	45%[†]	60%[†]
	\$100,000 or greater	53%[†]	66%[†]
Language			
	*Speak English: Very well or Well	39%	56%
	Speak English: Not well	15%[†]	14%
	Speak English: Not at all	5%[†]	0%
	*Took survey in English	40%	55%
	Took survey in Spanish	11%[†]	35%



Category	<i>Offered electronic access to your health information by health insurer/provider</i>	<i>Viewed medical record at least once within last year (among those who were offered access)</i>
Setting (rural, urban, etc.)		
Urban	41%	61%
*Suburban	39%	54%
Rural	30%	48%
Health and Functional Status		
Disability Composite		
*Yes to any disability	38%	52%
No to all disabilities	38%	56%
Chronic health condition		
*Yes	39%	49%
No	37%	59%

Notes: Weighted Percentages. *Denotes reference category. † items in bolded italic green font are significantly different from reference category, p<0.05

SOURCE: 2014 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange



Appendix Table 2. Individuals' Use of Certain Types of IT for Health-Related Needs by Selected Characteristics, 2014. (*†* items in bolded italic green font are significantly different from reference category, p<0.05)

Category		<i>Looked at test results online</i>	<i>Emailed Provider</i>	<i>Text messaged provider</i>	<i>Used smart phone health app</i>
	National Estimate	22%	31%	18%	17%
Demographics					
Sex					
	*Male	19%	31%	17%	16%
	Female	24%	31%	18%	18%
Age					
	18 to 29 years	20%	27%	16%	19%[†]
	30 to 39 years	24%	35%[†]	16%	20%[†]
	40 to 49 years	22%	32%	21%[†]	24%[†]
	50 to 59 years	27%[†]	35%[†]	25%[†]	21%[†]
	60 to 69 years	21%	32%[†]	15%	12%[†]
	*70 years or older	14%	22%	10%	3%
Race/Ethnicity/Hispanic Origin					
	Hispanic	13%[†]	22%[†]	18%	18%
	Non-Hispanic, Asian	22%	27%	22%	20%
	Non-Hispanic, Black	20%	24%	14%	8%[†]
	*Non-Hispanic, White	24%	34%	18%	19%
	Non-Hispanic, Others and Multi-Race	11%	31%	20%	18%
Education					
	Not A High School Graduate	5%[†]	8%[†]	7%[†]	10%[†]
	High School Graduate Or GED	9%[†]	18%[†]	15%[†]	8%[†]
	Some College Or 2-Year Degree	20%[†]	28%[†]	17%[†]	13%[†]
	4-Year College Graduate	30%	39%[†]	18%[†]	26%
	*More Than 4-Year College Degree	40%	54%	30%	29%
Income					
	*Less than \$25,000	7%	12%	8%	11%
	Between \$25,000 and \$49,999	19%[†]	27%[†]	20%[†]	13%[†]
	Between \$50,000 and \$99,999	29%[†]	42%[†]	22%[†]	22%[†]
	\$100,000 or greater	42%[†]	54%[†]	26%[†]	35%[†]
Language					
	*Speak English: Very well or Well	23%	32%	18%	18%
	Speak English: Not well	4%[†]	9%[†]	10%	12%
	Speak English: Not at all	0%	0%	0%	12%
	*Took survey in English	23%	32%	18%	18%
	Took survey in Spanish	6%[†]	8%[†]	14%	13%



Category	<i>Looked at test results online</i>	<i>Emailed Provider</i>	<i>Text messaged provider</i>	<i>Used smart phone health app</i>
Setting (rural, urban, etc.)				
Urban	26%	35%	16%	21%
*Suburban	23%	33%	20%	18%
Rural	14%[†]	19%[†]	13%	11%
Health and Functional Status				
Disability Composite				
*Yes to any disability	17%	23%	14%	11%
No to all disabilities	23%	33%[†]	19%	19%[†]
Chronic health condition				
*Yes	21%	31%	17%	16%
No	22%	31%	18%	18%

Notes: Weighted Percentages. *Denotes reference category. [†] items in bolded italic green font are significantly different from reference category, p<0.05

SOURCE: 2014 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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