ONC Data Brief No. 15 February 2014

Health care providers' role in protecting EHRs: Implications for consumer support of EHRs, HIE and patient-provider communication

Penelope Hughes JD MPH, Vaishali Patel PhD MPH, Joy Pritts JD

As the adoption of electronic health records (EHRs) and health information exchange (HIE) expands, and patient health information is increasingly stored and shared by providers electronically, it is important to monitor patient trust in providers' ability to keep that information private and secure.

In 2012, the Office of the National Coordinator for Health Information Technology (ONC) conducted a nationally representative telephone survey of 2,050 adult individuals, in both English and Spanish. The survey focused on their privacy and security attitudes, in particular when their health information is stored or transmitted electronically via EHRs and HIE. This data brief reports individuals' perceptions about the measures put in place by providers to protect EHRs, and its association with support for EHRs, HIE and patient-provider communication.

84% of individuals either strongly agree or agree that health care providers have measures in place that provide reasonable protections for EHRs.

Figure 1: National estimates of degree to which individuals' agree that health care providers are providing reasonable protections for EHRs



SOURCE: 2012 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange Note: Excludes 6.7% of individuals who refused or responded "Don't know"

★ Most individuals (84%) either agree or strongly agree that providers have reasonable protections in place for EHRs (Figure 1).

Support for EHRs is significantly higher among individuals who agree that health care providers have measures in place that provide reasonable protections for EHRs.

Figure 2: Percentage of individuals who support electronic health records by whether they agree that health care providers are providing reasonable protections for EHRs



SOURCE: 2012 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ Three-quarters of individuals (75%) express support for EHRs.
- ★ Only 17% of individuals who strongly disagree that health care providers adequately protect electronic health records support EHRs compared to 87% of individuals who strongly agree providers have adequate protections (Figure 2).

Individuals who disagree that health care providers have measures in place that provide reasonable protections for EHRs are less likely to support HIE.

Figure 3: Percentage of individuals who support electronic health information exchange by whether they agree that health care providers are providing reasonable protections for EHRs



SOURCE: 2012 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ Approximately three-quarters of individuals (74%) express support for HIE among healthcare providers treating them (Figure 3).
- ★ Only about 3 in 10 individuals (29%) who strongly disagreed that health care providers provide reasonable protections for EHRs support HIE; whereas 84% of individuals who strongly agreed that providers have adequate protections in place support HIE respectively.

Individuals who strongly disagree that health care providers have measures in place that provide reasonable protections for EHRs are more likely to withhold information from their provider due to privacy or security concerns.

Figure 4: Percentage of individuals who have withheld information from their provider due to privacy or security concerns



SOURCE: 2012 Consumer Survey of Attitudes Toward the Privacy and Security Aspects of Electronic Health Records and Health Information Exchange

- ★ Individuals who strongly disagree that health care providers have reasonable protections in place for EHRs are over 8 times more likely to have withheld information from their provider compared to those who strongly agree (33% vs. 4%) (Figure 4).
- ★ Compared to the overall population, individuals who strongly disagree that health care providers have reasonable protections in place for EHRs are almost 5 times more likely to have withheld information from their provider (33% vs. 7%).

The Office of the National Coordinator for Health Information Technology

Summary

ONC survey results indicate that individuals' trust in health care providers' ability to protect the privacy and security of their electronic health information is associated with their perceptions regarding EHRs, HIE, and communication with their provider. A large majority of individuals—84%—either strongly agree or agree that health care providers have measures in place that provide reasonable protections for EHRs. Additionally, approximately three-quarters of individuals support EHRs and HIE among providers treating them.

However, the 16% of individuals who disagree that health care providers are adequately protecting EHRs are significantly less likely to support both EHRs and HIE. The results show that consumer support for EHRs decreases with lower levels of agreement that health care providers are providing reasonable protections for EHRs. Support for EHRs drops from 87% among those who strongly agree providers provide reasonable protections to 17% among those who strongly disagree. Similarly, support for HIE drops from 84% among those who strongly agree that health care providers are providing reasonable protections for EHRs to 29% among those who strongly disagree.

Additionally, individuals' perceptions regarding healthcare providers' taking measures to protect EHRs are also associated with patient-provider communication. The survey examined whether individuals ever withheld information from their provider due to concerns about privacy or security. While a modest number of patients overall responded that they had kept information from their provider (7%); this increased five-fold among individuals who disagreed that providers were taking measures to protect EHRs.

The results of ONC's survey indicate that from the consumer's perspective, the provider plays an important role in ensuring reasonable protections are in place for EHRs. Consumers' lack of trust in providers' protections of EHRs has the potential to impact patient-provider communication and consumer support for health IT, including health information exchange. The results underscore the importance of encouraging and enabling providers to better safeguard patients' health information, in particular as it is stored and shared electronically.

Definitions

<u>Electronic Health Records</u>: For the purpose of the survey, the term "electronic medical records" was used to refer to such records and was defined as medical records that are created, stored and viewed on computers.

<u>Health Information Exchange</u>: For the purpose of the survey, the concept of health information exchange was described as health care providers using a computer to share a patient's medical records with other providers treating that patient.

Data Source and Methods

Data are from The Office of the National Coordinator'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.

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 Survey oversampled Hispanic 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. For the main survey data collection, the target number of completed interviews was 2,000. A total of 2,050 surveys were completed, with a response rate of 31.7%.

The items used to generate analysis reported in this survey included:

Have you ever kept information from your health care provider because you were concerned about the privacy or security of your medical record?

- YES
- NO

Health care providers have measures in place that provide a reasonable level of protection for electronic medical records today.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

I want my health care providers to <u>use</u> an electronic medical record to <u>store and manage</u> my health information despite any concerns I might have about privacy and security.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

I want my health care providers to use a computer to <u>share</u> my medical record with other providers treating me despite any concerns I might have about privacy and security.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

About the Authors

The authors are with the Office of the National Coordinator for Health Information Technology, Office of the Chief Privacy Officer and Office of Economic Analysis, Evaluation and Modeling.

Acknowledgements

MITRE and NORC at the University of Chicago contributed to the development of the survey instrument, survey administration, and data analysis.

Suggested Citation

Penelope Hughes JD MPH, Vaishali Patel PhD MPH, Joy Pritts JD. "Health care providers' role in protecting EHRs: Implications for consumer support of EHRs, HIE and patient-provider communication." *ONC Data Brief, no 15* Washington, DC: Office of the National Coordinator for Health Information Technology. February 2014.