State Variation in Electronic Sharing of Information in Physician Offices: United States, 2015

Eric W. Jamoom, Ph.D., M.P.H., M.S., and Ninee Yang, Ph.D.

Key findings

Data from the National Electronic Health Records Survey

• In 2015, the percentage of physicians who had electronically sent patient health information ranged from 19.4% in Idaho to 56.3% in Arizona.

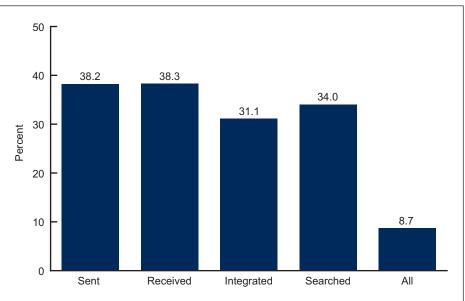
- In 2015, the percentage of physicians who had electronically received patient health information ranged from 23.6% in Louisiana and Mississippi to 65.5% in Wisconsin.
- In 2015, the percentage of physicians who had electronically integrated patient health information from other providers ranged from 18.4% in Alaska to 49.3% in Delaware.

• In 2015, the percentage of physicians who had electronically searched for patient health information ranged from 15.1% in the District of Columbia to 61.2% in Oregon. The Health Information Technology for Economic and Clinical Health Act (HITECH) provides financial incentives to eligible providers using a certified electronic health record (EHR) system (1,2). In 2015, 77.9% of office-based physicians had a certified EHR system, up from 74.1% in 2014 (3–5). A federal plan to enhance the nation's health information technology infrastructure was published in 2015 to support information sharing (6,7). Therefore, this report uses the 2015 National Electronic Health Records Survey (NEHRS) to describe the extent to which physicians can electronically send, receive, integrate, and search for patient health information.

Keywords: health information technology • *National Electronic Health Records Survey*

In 2015, about one-third of physicians had electronically sent, received, integrated, or searched for patient health information.

Figure 1. Percentage of office-based physicians who sent, received, integrated, or searched for patient health information electronically: United States, 2015



NOTE: Access data table for Figure 1 at: http://www.cdc.gov/nchs/data/databriefs/db261_table.pdf#1. SOURCE: NCHS, National Electronic Health Records Survey, 2015.



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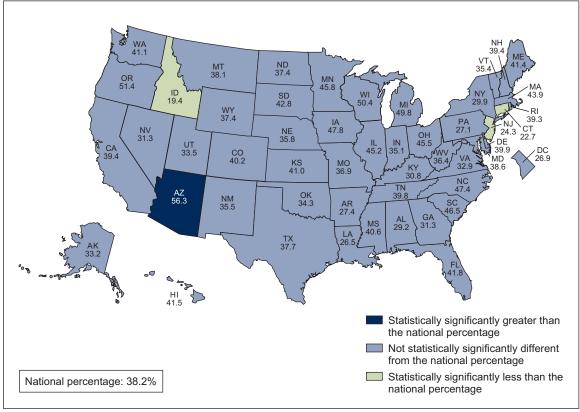


- In 2015, office-based physicians had electronically sent (38.2%), received (38.3%), integrated (31.1%), or searched (34.0%) for patient health information from other providers (Figure 1).
- In 2015, only 8.7% of office-based physicians had performed all four of these activities.

In 2015, 38.2% of physicians had electronically sent patient health information to other providers.

- In 2015, the percentage of physicians who had sent information electronically to other providers was less than the national percentage (38.2%) in Idaho (19.4%), Connecticut (22.7%), and New Jersey (24.3%) (Figure 2).
- In 2015, the percentage of physicians who had sent information electronically to other providers was greater than the national percentage in Arizona (56.3%).
- In 2015, the percentage of physicians who had sent patient health information electronically to other providers ranged from 19.4% in Idaho to 56.3% in Arizona.

Figure 2. Percentage of office-based physicians who sent patient health information electronically to other providers, by state: United States, 2015

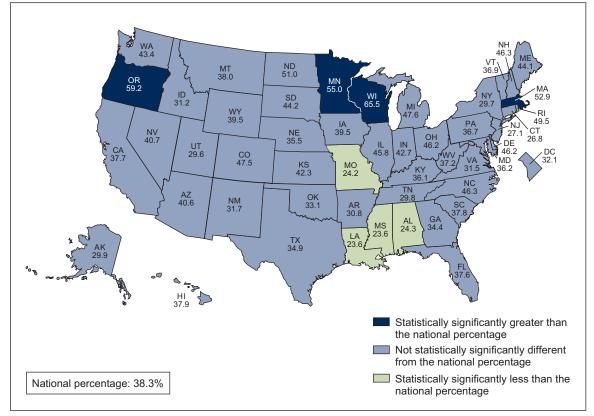


NOTES: Significance tested at *p* < 0.05. Access data table for Figure 2 at: http://www.cdc.gov/nchs/data/databriefs/db261_table.pdf#2. SOURCE: NCHS, National Electronic Health Records Survey, 2015.

In 2015, 38.3% of physicians had electronically received patient health information from other providers.

- In 2015, the percentage of physicians who had received information electronically from other providers was less than the national percentage (38.3%) in Louisiana (23.6%), Mississippi (23.6%), Missouri (24.2%), and Alabama (24.3%) (Figure 3).
- In 2015, the percentage of physicians who had received information electronically from other providers was greater than the national percentage in Massachusetts (52.9%), Minnesota (55.0%), Oregon (59.2%), and Wisconsin (65.5%).
- In 2015, the percentage of physicians who had received patient health information electronically from other providers ranged from 23.6% in Louisiana and Mississippi to 65.5% in Wisconsin.

Figure 3. Percentage of office-based physicians who received patient health information from other providers electronically: United States, 2015



NOTES: Significance tested at p < 0.05. Access data table for Figure 3 at: http://www.cdc.gov/nchs/data/databriefs/db261_table.pdf#3. SOURCE: NCHS, National Electronic Health Records Survey, 2015.

In 2015, 31.1% of physicians had electronically integrated patient health information from other providers.

- In 2015, the percentage of physicians who had electronically integrated information from other providers was less than the national percentage (31.1%) in Alaska (18.4%), the District of Columbia (18.6%), Montana (18.6%), Alabama (18.8%), and Idaho (20.6%) (Figure 4).
- In 2015, the percentage of physicians who had electronically integrated information from other providers was greater in Indiana (44.2%) and Delaware (49.3%) than the national percentage.
- In 2015, the percentage of physicians who had electronically integrated patient health information from other providers ranged from 18.4% in Alaska to 49.3% in Delaware.

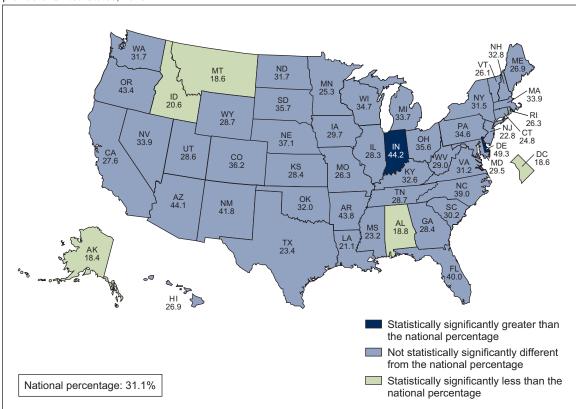


Figure 4. Percentage of office-based physicians who electronically integrated patient health information from other providers: United States, 2015

NOTES: Significance tested at *p* < 0.05. Access data table for Figure 4 at: http://www.cdc.gov/nchs/data/databriefs/db261_table.pdf#4. SOURCE: NCHS, National Electronic Health Records Survey, 2015.

In 2015, 34.0% of physicians had electronically searched for patient health information from other providers.

- In 2015, the percentage of physicians who had electronically searched for information from other providers was less than the national percentage (34.0%) in the District of Columbia (15.1%), Mississippi (19.7%), Pennsylvania (20.8%), Texas (21.0%), Missouri (21.6%), and Oklahoma (22.8%) (Figure 5).
- In 2015, the percentage of physicians who had electronically searched for information from other providers was greater than the national percentage in 10 states, including Ohio (47.2%), Alaska (47.3%), Colorado (47.5%), Maryland (47.9%), Virginia (48.3%), North Carolina (48.8%), Delaware (53.9%), Wisconsin (54.1%), Washington (58.0%), and Oregon (61.2%).
- In 2015, the percentage of physicians who had electronically searched for patient health information from other providers ranged from 15.1% in the District of Columbia to 61.2% in Oregon.

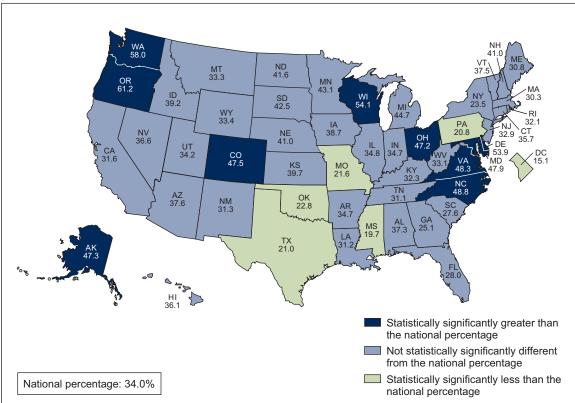


Figure 5. Percentage of office-based physicians who electronically searched for patient health information from other providers: United States, 2015

NOTES: Significance tested at *p* < 0.05. Access data table for Figure 5 at: http://www.cdc.gov/nchs/data/databriefs/db261_table.pdf#5. SOURCE: NCHS, National Electronic Health Records Survey, 2015.

Summary

In 2015, roughly one-third of all office-based physicians had electronically sent, received, integrated, or searched for patient health information from other providers. About 1 in 10 physicians had performed all four of these activities of electronic sharing of patient health information with other providers.

The percentage of physicians who had electronically sent, received, integrated, or searched for patient health information from other providers varied by state. The percentage of physicians who had electronically sent patient health information to other providers ranged from 19.4% in Idaho to 56.3% in Arizona, while the percentage of physicians who had electronically received patient health information from other providers ranged from 23.6% in Louisiana and Mississippi to 65.5% in Wisconsin. Physicians who had electronically integrated patient health information from other providers also varied for office-based physicians by state, from 18.4% in Alaska to 49.3% in Delaware. In addition, physicians who had electronically searched for patient health information from outside providers varied widely, from 15.1% in the District of Columbia to 61.2% in Oregon.

This report provides information about the state of interoperability among office-based physicians in 2015. These four measures of electronic sharing of patient health information by physicians will assist in tracking the progress outlined in the federal plan for achieving interoperability (6,7). HITECH provides funding to states to establish an infrastructure that enables providers to electronically share patient health information (8).

Definitions

<u>Sharing patient health information across four aspects of interoperability</u>: The 2015 National Electronic Health Records Survey (NEHRS) asked physicians several questions about sending, receiving, integrating, and searching for patient health information electronically:

- <u>Sending patient health information electronically</u>: NEHRS asked physicians, "Do you send patient health information to other providers and public health agencies outside your medical organization using the following methods of data transmission?" Physicians who answered "yes" to either the "EHR (not eFax)" or "Web Portal (separate from EHR)" methods were defined as having electronically sent patient health information.
- <u>Receiving patient health information electronically</u>: NEHRS asked physicians, "Do you receive patient health information from other providers and public health agencies outside your medical organization using the following methods of data transmission?" Physicians who answered "yes" to either the "EHR (not eFax)" or "Web Portal (separate from EHR)" methods were defined as having electronically received patient health information.
- <u>Integrating patient health information electronically</u>: NEHRS asked physicians, "When electronically receiving information from other providers, are you able to integrate the following types of patient health information into your EHR without special effort like manual entry or scanning?" The 10 different types of patient health information included: medication lists, patient problem lists, medication and allergy lists, imaging reports, laboratory results, registry data, referrals, hospital discharge summaries, emergency

department notifications, and summary-of-care records for transitions of care or referrals. Physicians who answered "yes" to at least one of the 10 different types of patient health information were defined as having electronically integrated patient health information.

• <u>Searching patient health information electronically</u>: NEHRS asked physicians, "How often do you electronically search for health information from sources outside of your medical organization when seeing a new patient or an existing patient who has received services from other providers?" Physicians who answered "always," "often," or "sometimes" were defined as having electronically searched for patient health information.

Data source and methods

Statistics are presented on data collected in the 2015 NEHRS. The NEHRS, which is conducted by the National Center for Health Statistics and sponsored by the Office of the National Coordinator for Health Information Technology, is a nationally representative mixed-mode survey of office-based physicians that collects information on physician and practice characteristics, including the adoption and use of EHR systems. NEHRS sampling design allows for both national and state-based estimates of EHR adoption. NEHRS is conducted annually as a sample survey of nonfederal office-based patient care physicians, excluding anesthesiologists, radiologists, and pathologists.

The 2015 NEHRS estimates include a sample of 10,302 physicians, which is designed to produce national and state-based estimates of office-based physicians. The 2015 NEHRS data collection took place from August through December 2015, and it used a sequential mixed-mode design to collect data through web, mail, and phone (4).

The overall unweighted response rate of the 2015 NEHRS questionnaire was 51.9% (49.2% weighted). A copy of the 2015 NEHRS questionnaire is available from the NCHS website at: http://www.cdc.gov/nchs/ahcd/ahcd_questionnaires.htm.

Statements of differences in estimates are based on statistical tests with significance at the p < 0.05 level. All differences are statistically significant unless stated otherwise. Data analyses were performed using the statistical package Stata version 14.0 (StataCorp LP, College Station, TX).

About the authors

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