ONC Data Brief ■ No. 28 ■ September 2015

Any, Certified, and Basic: Quantifying Physician EHR Adoption through 2014

Dawn Heisey-Grove, MPH; Vaishali Patel, PhD MPH

Physician adoption of electronic health record (EHR) systems has increased substantially over the last decade (1,2). As a result, health information technologies (IT) have evolved to include functionalities that better address what physicians need. In 2003, the Institute of Medicine (IOM) developed a definition for a Basic EHR (3) that included selected measures designed to promote safety. A certified EHR applies standards for electronic data capture and exchange of patient health information (4). The Office of the National Coordinator for Health IT's Certification Program allows providers to purchase only those certified health IT components that met their needs. By 2014, the National Electronic Health Record Survey began capturing physician use of a certified EHR. This brief provides estimates of office-based physician EHR adoption rates by 2014, for any EHR, certified EHR, and Basic EHRs.

More than 8 in 10 physicians had adopted an EHR.

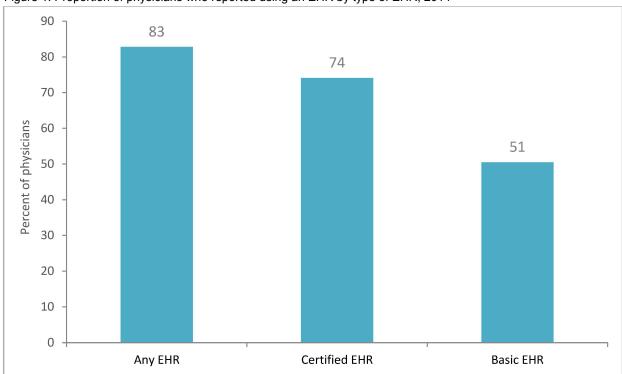


Figure 1: Proportion of physicians who reported using an EHR by type of EHR, 2014

SOURCE: Jamoom E, Yang N, Hing E. Percentage of office-based physicians using any electronic health records or electronic medical records, physicians that have a basic system, and physicians that have a certified system, by state: United States, 2014 (table). 2015.

- ★ Almost three-quarters of physicians had adopted a certified EHR.
- ★ 51% of physicians were using all Basic EHR functionalities.

While the majority of physicians used most Basic EHR functionalities, only 6 in 10 electronically viewed imaging results.

100 90 86 86 84 83 82 78 80 70 61 Percent of physicians 60 50 40 30 20 10 0 Record Computerized Record Record Record View View imaging demographic prescription patient's clinical notes patient laboratory results information order entry medications problem lists results and allergies

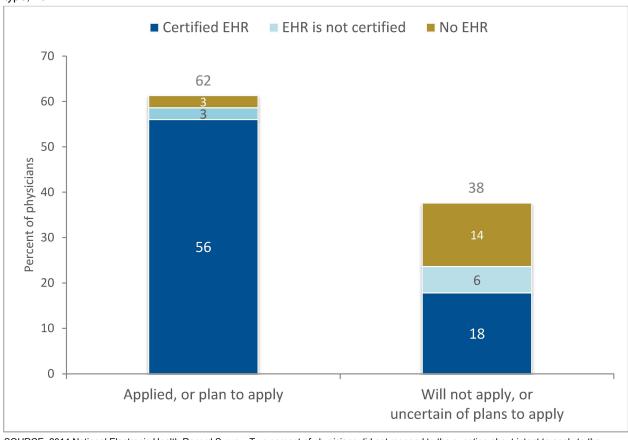
Figure 2: Proportion of physicians who reported using computerized functionalities that met Basic EHR criteria, 2014.

SOURCE: 2014 National Electronic Health Record Survey.

- ★ The computerized function reported by the most physicians was the ability to record patient demographic information (86%).
- ★ Six in 10 physicians reported having the capability to electronically view imaging results.
- ★ More than 8 in 10 physicians reported their EHRs allowed them to use computerized prescription order entry, record clinical notes, patient's medications, allergies, and problem lists, and view laboratory results.

A majority of physicians used certified EHRs, regardless of their participation in the EHR Incentive Program.

Figure 3: Proportion of physicians participating, or planning to participate, in CMS' EHR Incentive Program, by EHR type, 2014.



SOURCE: 2014 National Electronic Health Record Survey. Two percent of physicians did not respond to the question about intent to apply to the Medicaid and Medicare EHR Incentive Programs, and were not included in the analysis.

- ★ Almost two-thirds of physicians applied, or planned to apply, to the Medicare and Medicaid EHR Incentive Programs (5).
- ★ Thirty-eight percent of physicians will not apply, or were uncertain of plans to apply to the Medicare and Medicaid EHR Incentive Programs.
- ★ Among physicians who stated they would not apply, or were uncertain about applying the Medicare and Medicaid EHR Incentive Programs, 47% had adopted a certified EHR.
- ★ More than a third of physicians who stated they would not apply, or were uncertain about applying the Medicare and Medicaid EHR Incentive Programs were not using an EHR.

Primary care physicians reported the highest rates of adoption for any EHR, certified EHR, and Basic EHR.

■ Certified EHR ■ EHR is not certified ■ Basic EHR 100 87 90 80 8 78 80 10 8 70 Percent of physicians 60 50 40 79 70 70 30 20 10 0 Any EHR Basic EHR Any EHR Basic EHR Any EHR Basic EHR **Medical Specialists** Surgical specialists Primary care

Figure 4: Proportion of physicians who reported using an EHR by specialty, 2014

SOURCE: 2014 National Electronic Health Record Survey.

- ★ More than 8 in 10 primary care physicians adopted any EHR by 2014.
- ★ Primary care physicians had the highest rate of adoption of certified EHRs at 79%.
- ★ More than half (56%) of primary care physicians were using all Basic EHR functionalities.
- ★ Fewer than half of medical and surgical specialists reported using all Basic EHR functionalities.

Solo practitioners had the lowest rates of adoption for any EHR, certified EHR, and Basic EHR.

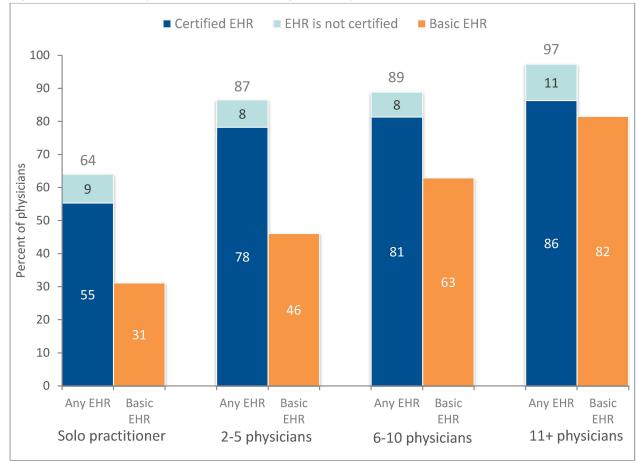


Figure 5: Proportion of physicians who reported using an EHR by practice size, 2014.

 $SOURCE: 2014\ National\ Electronic\ Health\ Record\ Survey.$

- ★ Ninety-seven percent of physicians in the largest practices (11+physicians) adopted an EHR by 2014.
- ★ More than 8 in 10 physicians in practices with more than 5 physicians adopted a certified EHR.
- ★ Solo practice physicians had the lowest EHR adoption rates by 2014: 64% reported using any EHR; 55% reported using a certified EHR; and less than a third reported using all Basic EHR functionalities.
- ★ Less than half of physicians in practices with 2-5 physicians were using all Basic EHR functionalities.

Physicians in community health centers reported the highest adoption rate for any EHR; but had low rates for certified and Basic EHR adoption.

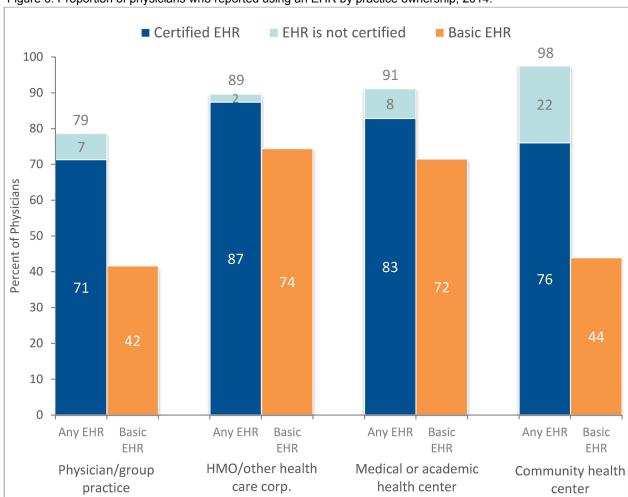


Figure 6: Proportion of physicians who reported using an EHR by practice ownership, 2014.

SOURCE: 2014 National Electronic Health Record Survey.

- ★ Ninety-eight percent of physicians in community health centers had adopted an EHR by 2014; three-quarters of them were using a certified EHR.
- ★ By 2014, less than half of physicians in community health centers and physician or group-owned practices were using all Basic EHR functionalities.
- ★ Physicians in physician- or group-owned practices reported the lowest EHR adoption rates across all three adoption categories.
- ★ Physicians working in HMO-owned, or in practices owned by other insurance or health care corporations, reported the highest adoption rates of certified EHRs at 87%.

Summary

These data demonstrate that as of 2014, a majority of office-based physicians have adopted EHRs. More than 8 in 10 physicians had adopted any EHR, almost three-quarters of physicians had adopted a certified EHR, and a little over half of office-based physicians were using all functionalities associated with a Basic EHR. Rates of Basic EHR adoption were lower because only 6 in 10 physicians were using "viewing imaging results," one of the Basic EHR criteria. Adoption of each of the other Basic EHR criterion was above 80%.

Findings of disparities in adoption among physicians located in solo and small group practices and physician- and group-owned practices, as well as among non-primary care specialties are consistent with prior literature (6,7,8,9). In addition, large differences in Basic EHR adoption were observed among solo and small group practice physicians, and within physician and group-owned practices and community health centers. These findings may be related to the fact that the Basic EHR definition includes functionalities that apply primarily to certain physician specialties and may not be broadly applicable across the care continuum.

In contrast, disparities in certified EHR use were less prevalent among office-based physicians. Physician adoption of certified EHRs was within 10 percentage points of overall EHR adoption, with the exception of physicians in practices of more than 10 physicians and in community health centers. Adoption of certified EHRs was common even among physicians not participating in the Incentive Programs; almost half of these physicians indicated they used a certified EHR.

Definitions

<u>Any EHR:</u> Physicians indicated that their reporting location used electronic medical records, not including medical records

<u>Basic EHR</u>: Physicians indicated that their reporting location used all of the following computerized functions: record patient demographics, computerized prescription order entry, viewed laboratory and imaging results, and recorded clinical notes, patient medications, allergies, and problem lists.

<u>Certified EHR</u>: Physicians indicated that their reporting location used an EHR, and that EHR being used at the reporting location met the criteria for Meaningful Use (5).

Data Source and Methods

The Centers for Disease Control and Prevention conducts the NEHRS survey on an annual basis. Physicians included in this survey provide direct patient care in office-based practices and community health centers; excluded are those without direct patient care (radiologists, anesthesiologists, and pathologists). Additional documentation regarding the survey is available here: http://www.cdc.gov/nchs/ahcd/ahcd_survey_instruments.htm#namcs Descriptive statistics were based on weighted frequencies generated using SAS v9 proc surveyfreq.

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About the Authors

The authors are with the Office of the National Coordinator for Health Information Technology, Office of Planning, Evaluation, and Analysis and the Office of Clinical Quality and Safety.

Suggested Citation

Heisey-Grove, D., Patel, V. (September 2015) Any, Certified, or Basic: Quantifying Physician EHR Adoption. *ONC Data Brief, no. 28*. Office of the National Coordinator for Health Information Technology: Washington DC.