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Vendors of Certified Electronic Health Record Technology: Trends and Distributions from Meaningful Use Attestations as of October 31, 2012

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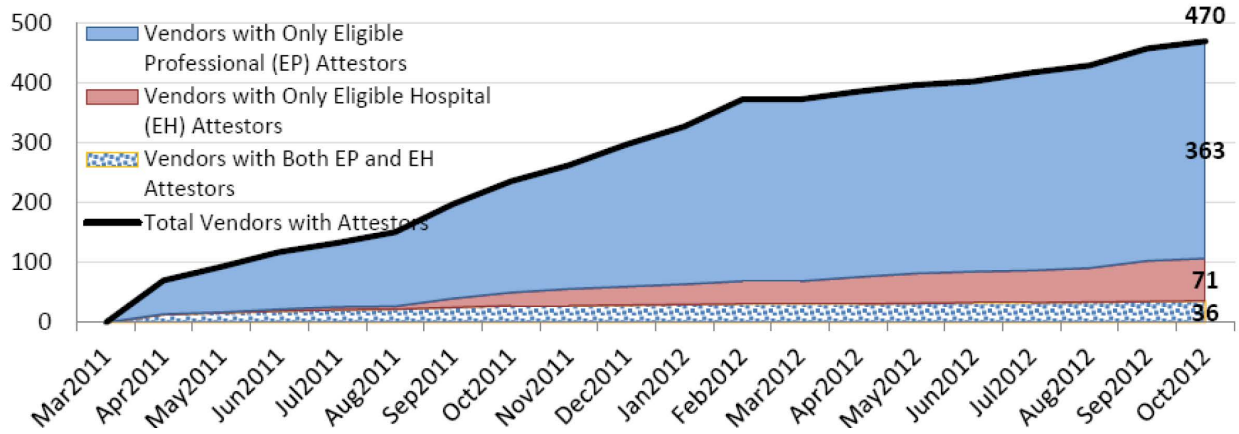
The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 directs the Office of the National Coordinator for Health Information Technology (ONC) to promote the adoption and meaningful use of certified electronic health record technology (CEHRT). In addition, HITECH authorizes the Centers for Medicare & Medicaid Services (CMS) EHR Incentive Programs to encourage eligible professionals and hospitals, through incentive payments, to adopt and meaningfully use CEHRT. For providers to receive an incentive payment from the Medicare EHR Incentive Program they must attest to using CEHRT. As one of its HITECH implementation responsibilities, ONC established and administers the Certified Health IT Product List (CHPL), which is the single authoritative, comprehensive listing of all CEHRT products that have been tested and certified for use by providers participating in the CMS EHR Incentive Program. Combined, data from the CMS Medicare EHR Incentive Program and the ONC CHPL enable the analysis of the market for CEHRT products used for Stage 1 Meaningful Use attestation. This brief describes the vendors and the competitiveness of this market from the onset of attestations through October 2012.

Over 400 vendors provided CEHRT products used for MU attestation.

Figure 1: Number of vendors with CEHRT products used for MU attestation



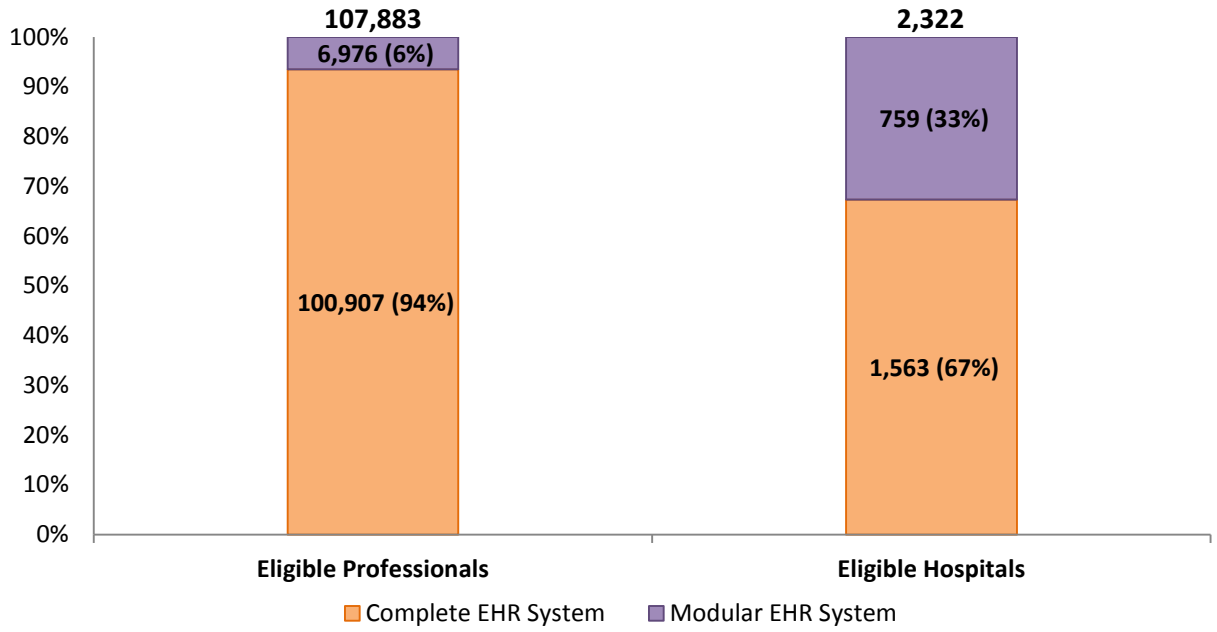
SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012
NOTE: Totals exclude vendors with CEHRT products that have not yet been used for MU attestation.

★ 470 vendors provided CEHRT products used by eligible professionals and hospitals for MU attestation (Figure 1).

★ 363 of the 460 (77%) vendors provided CEHRT products used by only eligible professionals for MU attestation.

Modular EHR systems were used by one-third of eligible hospitals but used by very few eligible professionals.

Figure 2: Number and percent of eligible professionals and hospitals using complete vs. modular EHR systems for MU attestation

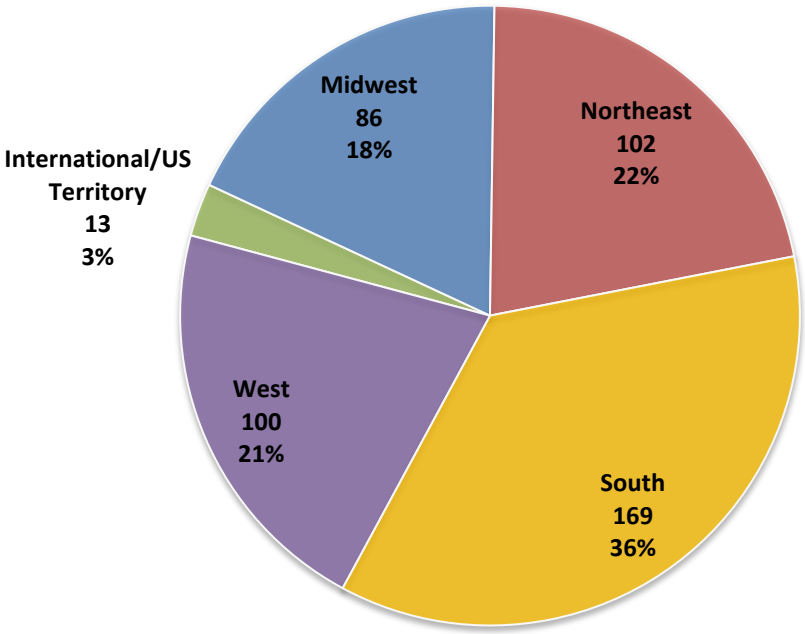


SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012

- ★ 110,205 health care providers had attested to Meaningful Use as of October 2012, and eligible professional made up the majority (98%) of those attestations (Figure 2).
- ★ Very few (6%) eligible professionals used a modular EHR system for MU attestation, whereas one third (33%) of eligible hospitals used a modular system.

Vendors with CEHRT products used for MU attestation have headquarters located across all U.S. regions.

Figure 3: Number and percent of vendors with CEHRT products used for MU attestation by U.S. region and international/U.S. territory

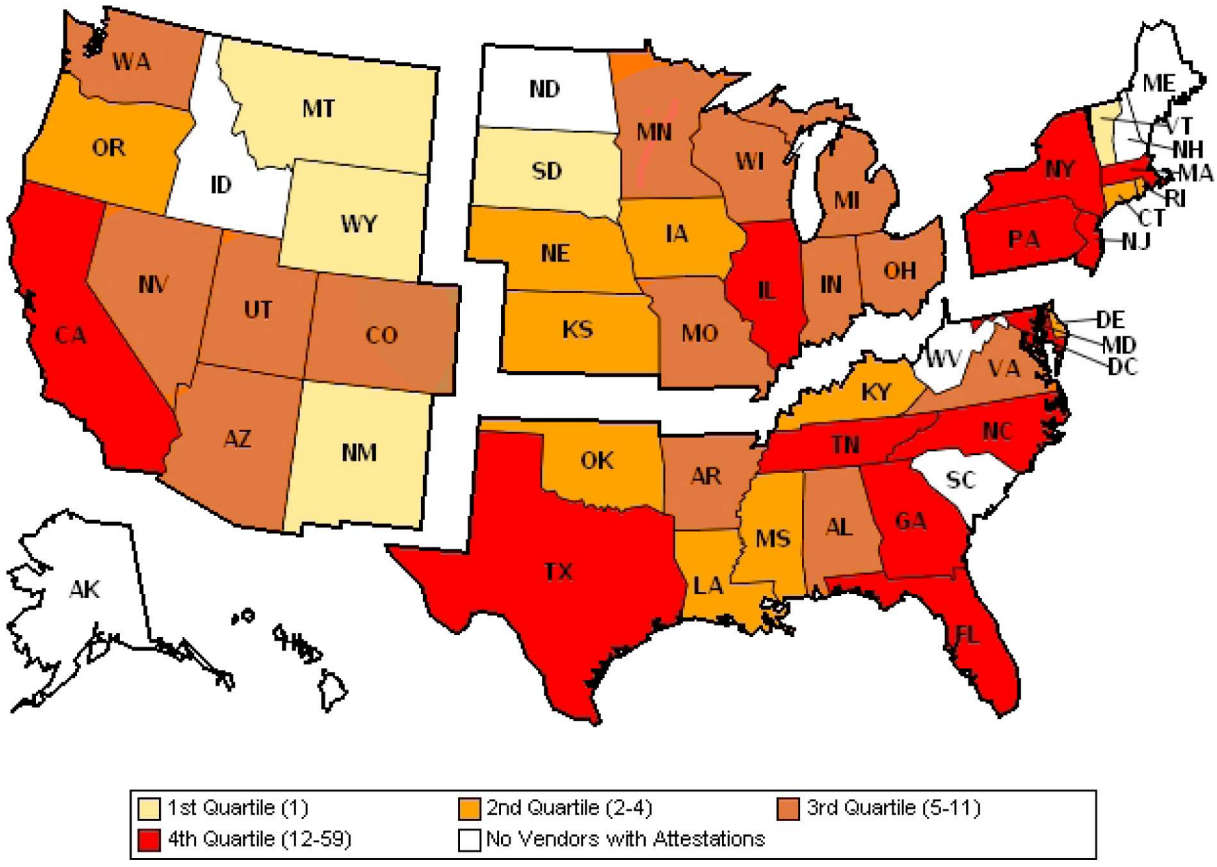


SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012

- ★ The South region had the most vendor headquarters (36%), while the other U.S. regions account for about 20% each (Figure 3).
- ★ International and U.S. Territory based vendors represent only 3% of all vendors with CEHRT products used for MU attestation.

The majority of U.S. states have multiple vendor headquarters located in their state.

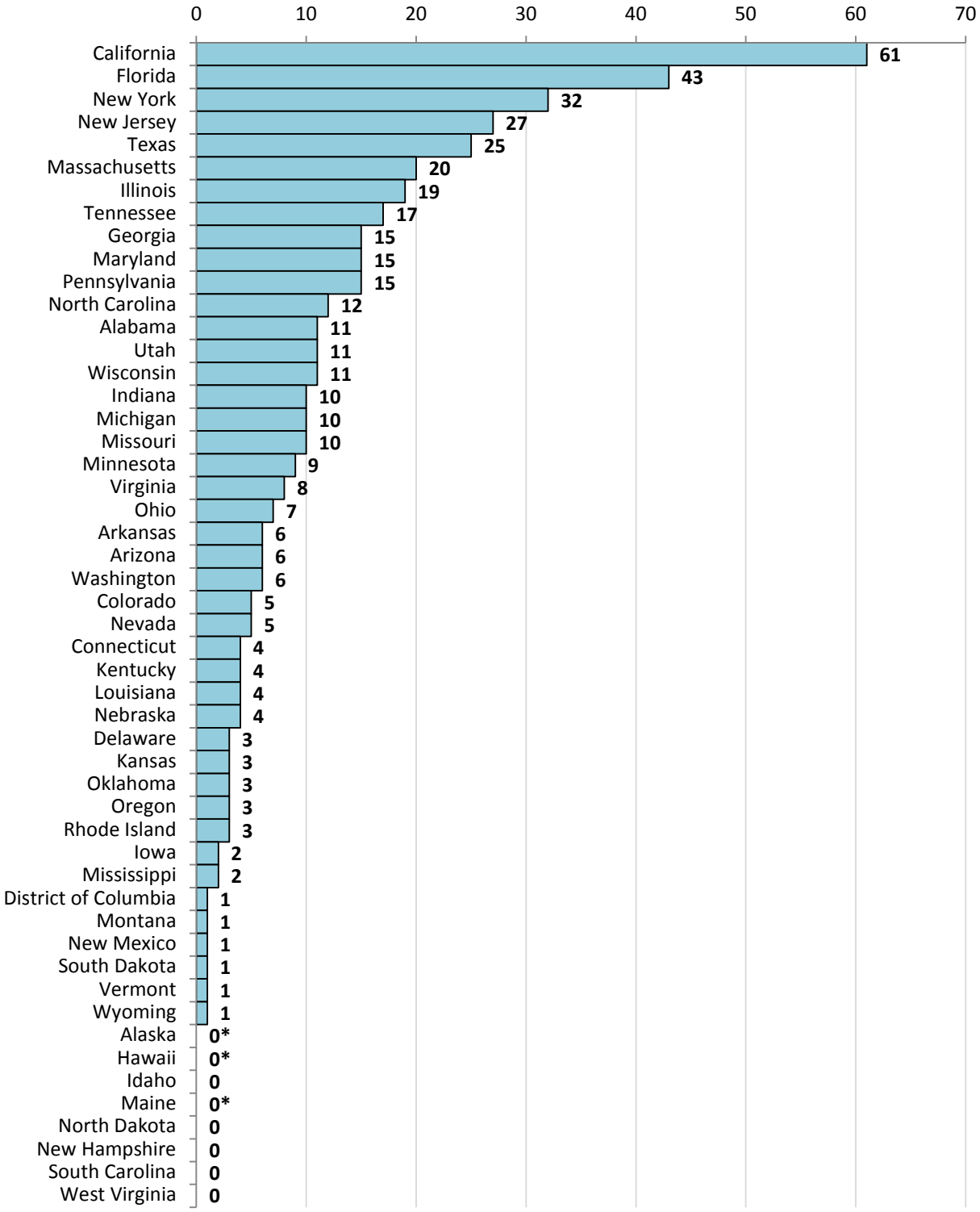
Figure 4: Number of vendors with CEHRT products used for MU attestation by state



SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012

- ★ Each region had at least one state in the top quartile for number of headquarters for CEHRT vendors with products used for MU attestation: West: California; South: Florida, Georgia, Maryland, North Carolina, Tennessee, and Texas; Midwest: Illinois; and Northeast: New Jersey, New York, Massachusetts, and Pennsylvania (Figure 4).
- ★ Alaska, Hawaii, and Maine had no CEHRT vendor headquarters located in their state.
- ★ See Figure 5 below for more detailed description of each state

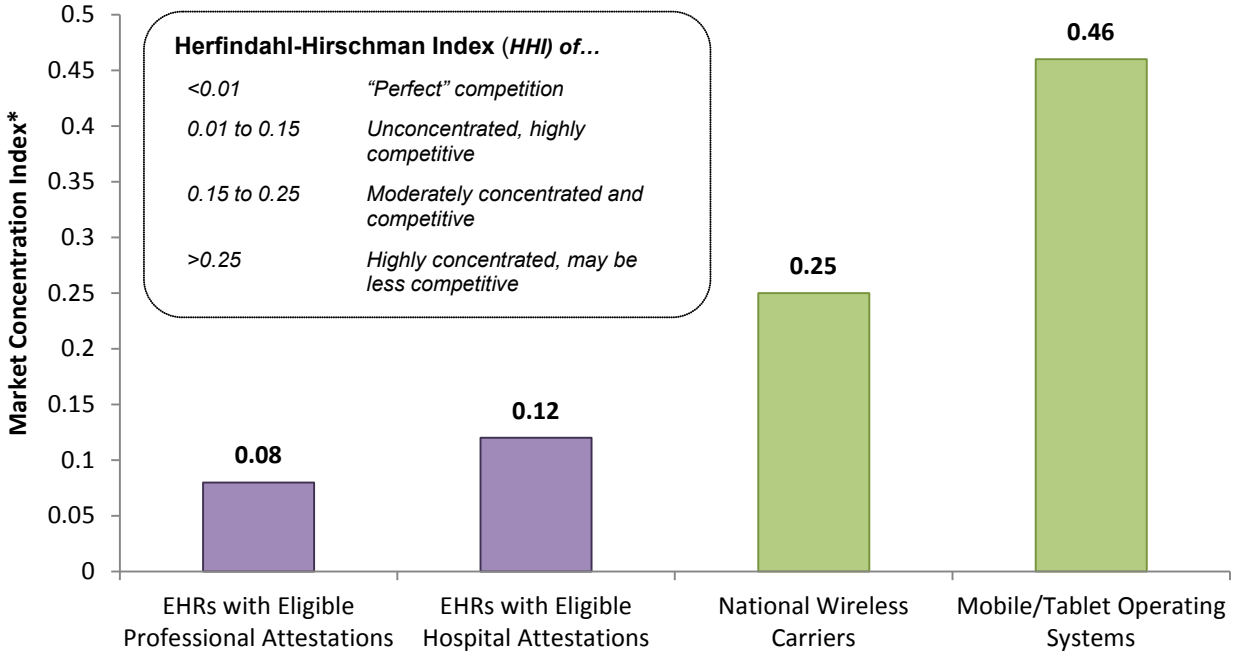
Figure 5: Number of vendors with CEHRT products used for MU attestation by state



SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012
*No CEHRT vendor headquarters located in the state.

The market for CEHRT products used for MU attestation is unconcentrated and highly competitive.

Figure 6: Competitiveness of CEHRT market among MU attestations, relative to other IT industries.



SOURCES: ONC analysis of data from Certified Health IT Product List (CHPL) & CMS EHR Incentive Program, as of October 31, 2012
Wireless – US Dept Justice (2011)
Mobile OS – Netmarketshare (2012)
NOTE: Modular EHR systems were excluded from this analysis because neither data source accurately indicates which products providers use as their primary CEHRT in such systems.
*Herfindahl-Hirschman Index – a measure of the size of individual firms in relation to the industry. It is an indicator of the amount of competition among firms within an industry.

- ★ The CEHRT market among eligible professional attestations is highly competitive and unconcentrated, with an HHI of 0.08 (Figure 6).
- ★ The CEHRT market among eligible hospital attestations is more concentrated than the eligible professional attestations market, but still unconcentrated and highly competitive, with a HHI of 0.12.
- ★ Relative to some other IT industries (wireless carriers and mobile/tablet operating systems), the CEHRT market among MU attestations appears much more competitive.

Summary

ONC's CHPL and the CMS EHR Incentive Program provide unique data to explore the CEHRT market among MU attestations. The certification process for CEHRT products represents the first step for new vendors to participate in this market. A CEHRT product must enable a provider to meet the requirements for the meaningful use of health IT. Additionally, providers must successfully attest that they meet those requirements using a CEHRT. 470 vendors provided CEHRT products used for MU attestation as of October 2012. Among them, nearly 77% (363) provided CEHRT products that have been used only by eligible professionals for MU attestation. Thus, the greatest variety of CEHRT vendors was available to eligible professionals.

This brief demonstrates that both eligible professionals and eligible hospitals generally prefer complete EHR systems. 94% of eligible professionals and 67% of eligible hospitals attested to MU with such products. However, hospitals used more modular EHR systems, with over one-third attesting to MU with them.

Additionally, the growth and dispersion of the CEHRT industry appears to be nationwide. The South region had the greatest proportion of CEHRT vendor headquarters (36%). Among the Southern states, Florida, Georgia, Maryland, North Carolina, Tennessee, and Texas had the most vendors. The Northeast, West, and Midwest regions had headquarters for the remaining vendors at about 20% each. California is the leading state in the West; Illinois in the Midwest; and Pennsylvania, Massachusetts, New Jersey, and New York in the Northeast. Overall, the majority of states had more than one CEHRT vendor with headquarters located in their state.

An analysis of the market for CEHRT products used for MU attestation indicates that both markets for eligible professionals and hospitals are unconcentrated and highly competitive. On the Herfindahl-Hershman Index (HHI), a measure of market concentration, they fall between 0.01 and 0.15. The market for eligible professionals is at 0.08, and the market for eligible hospitals is a bit more concentrated at 0.12. Compared to similar IT industries, such as national wireless carriers and mobile/tablet operating systems, the HHI makes the openness and extent of competition clear among the market for CEHRT products used for MU attestation. The data indicate there may be relatively little difficulty for vendors to enter this market. The large number of CEHRT vendors with certified products used for MU attestation suggests that a broad range of vendors compete with one another on the shared standards for certification.

Definitions

Meaningful Use (MU) Attestation: A provider attests to Stage 1 MU of a CEHRT product if they meet certain objectives and report clinical quality measures (CQMs). The table below describes the number of objectives and CQMs an eligible provider's CEHRT must meet in order to attest to MU. Several of the objectives have minimum thresholds, requiring the provider to demonstrate not only capability, but also actual use of those functions with their CEHRT.

Table: Requirements for Meaningful Use Stage 1 Attestation under the EHR Incentive Program

Requirements	Eligible Professionals	Eligible Hospitals
Core Objectives	15/15	14/14
Menu Objectives	5/10	5/10
Core Clinical Quality Measures	3/3	15/15
Additional Clinical Quality Measures	3/38	n/a

Eligible Professionals: Under the Medicare EHR Incentive Program, eligible professionals include doctors of medicine or osteopathy, doctors of dental surgery or dental medicine, doctors of podiatric medicine, doctors of optometry, and chiropractors.

Eligible Hospitals: Under the Medicare EHR Incentive Program, eligible hospitals include subsection (d) hospitals in the 50 states or DC that are paid under the hospital inpatient prospective system, critical access hospitals, and Medicare Advantage affiliated hospitals.

Complete vs. Modular EHR Systems: Refers to the type of CEHRT that a provider uses to attest to MU. The certification process requires that a product meet 34 ambulatory or inpatient criteria to obtain certification as a complete product. A modular product may meet less than 34 criteria with a minimum of one criterion (in addition to privacy/security criteria, as applicable) in either setting. Complete EHR systems are those where a provider has used one complete product to attest to MU. Thus, this single product is capable of meeting all the stage 1 MU objectives. Modular EHR systems are those where a provider has used two or more products to attest to MU. These products may consist of combinations of two or more complete products, modular products, or combinations of complete and modular products. In this case, the provider uses neither product alone to meet all the requirements for stage 1 MU, but rather different products for different requirements.

Data Source and Methods

Data are from the Certified Health IT Product List (CHPL) (http://healthit.hhs.gov/CHPL) and the CMS Medicare and Medicaid EHR Incentive Program, electronic health record products used for attestation public use file (http://www.healthdata.gov/data/dataset/cms-medicare-and-medicaid-CEHRT-incentive-program-electronic-health-record-products-used) as if October 31, 2012. The public use file is a collaborative effort between ONC and CMS combining data from the CHPL and CMS's own records on MU attestation.

Limitations

These findings may not be representative of the entire CEHRT market since it excludes vendors that do not have any product used for MU attestation. While the CHPL collects data on all vendors with certified products, it does not remove vendors that have left the market or have merged with other vendors. Thus, some of the numbers presented here may be slightly inflated. However, since it is unlikely that vendors who have left the market have certified products used for MU attestation, the data presented here should fairly reflect the market activity among MU attestations.

Additionally, the measures of market competition among CEHRT vendors with products used for MU attestation were limited to attestations with complete EHR systems. The analysis excluded modular EHR systems because the data sources did not distinguish which was the primary CEHRT in such systems. For eligible professionals, the effect should be negligible as 94% of them used complete EHR systems. Among eligible hospitals, where the analysis excluded the 33% using modular systems, the HHI may be slightly lower than reported, if some vendors were excluded.

Finally, CMS regularly updates and validates their data. Therefore, results from prior months may change slightly in future versions of the public use file. This brief reflects the best available data at the time of publication.

About the Authors

The authors are with the Office of the National Coordinator for Health Information Technology: Office of Economic Analysis, Evaluation, and Modeling; and Office of Certification.

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