

Time to unleash power of tools to audit physicians' EHR burden

APR 12, 2021

Tanya Albert Henry

Contributing News Writer

Electronic health record audit logs are a powerful new tool to further understand doctors' EHR use. But there needs to be more transparency, granularity and standardization across the products that vendors offer so better care can be delivered and physician well-being can be improved, says a new study.

It "is crucial to enhance the capability of hospital administrators, departmental leaders and researchers to more accurately assess and compare EHR use across vendors and health systems," the study's authors explained in their paper, "Characterizing physician EHR use with vendor derived data: a feasibility study and cross-section analysis." The study was recently published in the *Journal of the American Medical Informatics Association* and the AMA's vice president of professional satisfaction, internist Christine A. Sinsky, MD, was the senior author.

Researchers used metrics from two health systems with different EHR systems to see if they could implement seven proposed EHR metrics that were outlined in an earlier study Dr. Sinsky helped write. These are: work done outside of work; time on documentation; time on prescriptions; inbox time; teamwork for orders; and undivided attention physicians give to patients.

In what's believed to be the first study to measure EHR use in two different vendor products in a standardized way, researchers compared data from Yale-New Haven Health System's Epic EHR in Connecticut, Rhode Island and New York, and MedStar Health's Cerner Millennium EHR in Washington, D.C, Virginia and Maryland.

The researchers were able to extract five of the seven EHR metrics from each of the EHR systems. They noted, however, that even for the metrics that were measurable, some of the measure implementations were imperfect or differed substantially between vendors.

In particular, how time is measured by each vendor differs. For one vendor, the method is proprietary, and the details are not publicly known. For the other, the clock stops after five seconds of inactivity.

“These measures may each underestimate the total time physicians spend on the EHR,” Dr. Sinsky noted. “The intent of the study was to test the feasibility of the measures—it was not to compare time spent on various EHR functions across vendors. We determined that audit log data can be used to characterize how physicians spend time on the EHR. This will be especially useful in tracking over time the impact of workflow, teamwork and policy interventions designed to decrease physician time on EHR tasks and increase physician time with patients.”

Visit the AMA digital health page to learn more about how the AMA is committed to ensuring the physician perspective is represented in the design, implementation and evaluation of new health care technologies.

What the data shows

After adjusting the numbers to make them as comparable as possible, authors found that for every eight hours that ambulatory, nonteaching attending physicians have scheduled clinical time, they spent more than five hours on the EHR. Of this time:

- 33% is spent on documentation.
- 13% is used on inbox activity.
- 12% is spent on orders.

In addition:

- Female physicians spent about 30 minutes more on the EHR compared with male colleagues for every eight hours of clinical time.
- Physicians in procedural specialties spend less time overall in the EHR, with a higher contribution of teamwork on orders compared with those in primary care.
- Physician age, health system and EHR vendor did not make a difference in the amount of time physicians spent on EHR.

Next steps

The 21st Century Cures Act, enacted with bipartisan support in 2016, requires an EHR reporting program with a usability focus for vendors to maintain certification. Standard and objective EHR use measures have been proposed by other researchers as an essential component to the program.

To help standardize EHR use reporting across all physicians and for the remaining measure, Dr. Sinsky and her co-authors wrote that vendors need to more reliability distinguish:

- Specifications for work outside of scheduled hours that include all of the time before and after scheduled hours, rather than a one-size-fits all clock time interval.
- Standardized time out intervals.
- Actual start and end visit times.
- Clinical context.
- Teaching physicians' clinical scheduled hours.
- Specific time on prescription versus orders in general.

“Understanding EHR use at scale has the potential to monitor, benchmark and improve care delivery and physician wellness,” the study says.

The AMA collaborated with MedStar Health to create [EHRSeeWhatWeMean.org](https://www.ehrsee.com) to demonstrate the risks and challenges caused by poor usability in EHR technology that reduces the time available for physicians to care for patients.