



AAFP Backgrounder: EHR Usability Burden

EHR usability — measured by a given system's effectiveness, efficiency, safety, and overall user satisfaction — is dismal. It comes with many administrative requirements not directly related to patient care while relying heavily on inefficient point-and-clicking for basic navigate and entering information and orders.

This is why physicians describe using their EHRs as “death by a thousand clicks.”

Today, many family physicians often see 24-32 patients a day in short 10- to 15-minute visits (necessitated by fee-for-service payment models or RVU-based compensation), leaving them insufficient time to complete their EHR work each day and requiring extensive after-hours work. EHR ineffectiveness, inefficiency, and dissatisfaction significantly contribute to administrative burden and burnout.

Impact

A study of all physicians has shown clear associations between burnout and EHR usability. It measured three health IT-related stress factors related to EHR inefficiencies and dissatisfaction and found

- inadequate time for EHR documentation,
- too much time on EHR work at home, and
- added frustration.

The study revealed that physicians reporting these stresses were than two to three times more likely to suffer burnout than those who did not. The factors by which EHR stress multiplied burnout were noted by specific cause.

- Physicians who said they did not have enough time for EHR documentation were 2.81 times more likely to feel burned out.
- Those who said they spent moderately high or excessive amounts of time at home on EHR were 1.93 times more likely.
- Physicians who agreed that EHRs add to the frustration of the day were 2.44 times more likely.

Family physicians are under additional stress, which compounds their EHR usability burden. This is in part because the specialty

- treats the broadest diversity of patient types and issues,
- treats complex patients with multiple chronic diseases,
- must coordinate care with other specialists across the health system, and
- must see higher numbers of patients to survive financially.



Study: EHRs Contribute to Family Physician Stress, Burnout

<https://academic.oup.com/jamia/article/26/2/106/5230918?login=false>

Sources

<http://dx.doi.org/10.1370/afm.2121>



Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties | Annals of Internal Medicine

Updated on Sep 5, 2016

Background: Little is known about how physician time is allocated in ambulatory care.

Objective: To describe how physician time is spent in ambulatory practice. Design: Quantitative direct observational time and motion study (during office hours) and self-reported diary (after hours). Setting: U.S. ambulatory care in 4 specialties in 4 states (Illinois, New Hampshire, Virginia, and Washington). Participants: 57 U.S. physicians in family medicine, internal medicine, cardiology, and orthopedics who were observed for 430 hours, 21 of whom also completed after-hours diaries. Measurements: Proportions of time spent on 4 activities (direct clinical face time, electronic health record [EHR] and desk work, administrative tasks, and other tasks) and self-reported after-hours work. Results: During the office day, physicians spent 27.0% of their total time on direct clinical face time with patients and 49.2% of their time on EHR and desk work. While in the examination room with patients, physicians spent 52.9% of the time on direct clinical face time and 37.0% on EHR and desk work. The 21 physicians who completed after-hours diaries reported 1 to 2 hours of after-hours work each night, devoted mostly to EHR tasks. Limitations: Data were gathered in self-selected, high-performing practices and may not be generalizable to other settings. The descriptive study design did not support formal statistical comparisons by physician and practice characteristics. Conclusion: For every hour physicians provide direct clinical face time to patients, nearly 2 additional hours is spent on EHR and desk work within the clinic day. Outside office hours, physicians spend another 1 to 2 hours of personal time each night doing additional computer and other clerical work. Primary Funding Source: American Medical Association.



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Lessons From the Road to EHR Usability

Updated on May 14, 2017

You may be able to get more out of your electronic health record by discovering the system's hidden tools.



American Academy of Family Physicians

<https://www.sciencedirect.com/science/article/pii/S1532046411001328>

<https://www.sciencedirect.com/science/article/pii/S1532046411001328>

<https://jamanetwork.com/journals/jama/article-abstract/2676098>

1. Institute of Medicine. Health IT and patient safety building safer systems for better care.

[Health IT and Patient Safety: Building Safer Systems for Better Care](#) -safety-building-safer-systems-for-better. Accessed February 19, 2018.

2. International Organization for Standardization. ISO/IEC 25010:2011—Systems and software engineering—Systems and Software Quality Requirements and Evaluation (SQUARE). <https://www.iso.org/obp/ui/#iso:std:iso-iec:25010:ed-1:v1:en>. Accessed February 19, 2018.
3. Ellsworth MA, Dziadzko M, O'Horo JC, Farrell AM, Zhang J, Herasevich V. An appraisal of published usability evaluations of electronic health records via systematic review. *J Am Med Inform Assoc*. 2016;24(1):218-226.
4. Office of the National Coordinator for Health Information Technology. Certified health IT developers and editions reported by hospitals participating in the Medicare EHR incentive program. <https://dashboard.healthit.gov/quickstats/pages/FIG-Vendors-of-EHRs-to-Participating-Hospitals.php>. Accessed April 7, 2016.
5. Cullen DJ, Bates DW, Small SD, Cooper JB, Nemeskal AR, Leape LL. The incident reporting system does not detect adverse drug events: a problem for quality improvement. *Jt Comm J Qual Improv*. 1995;21(10):541-548.
6. Ratwani RM, Benda NC, Hettinger AZ, Fairbanks RJ. Electronic health record vendor adherence to usability certification requirements and testing standards. *JAMA*. 2015;314(10):1070-1071