A Rationale for the Toolkit: Addressing the Problem of the EHR's Contribution to Clinician Burnout

By David Lee Scher, MD, for the HIMSS Clinician Burden Reduction Task Force

Implementing electronic health records (EHRs) has had the unintended consequence of adding to clinician burnout. Contributing factors include increased administrative burdens, usability issues, data overload and interference with the clinician-patient relationship, which in turn negatively impact clinicians' mental and physical health, professional life and patient care.

The administrative burdens created by the EHR include an increase in inbox messages, which may come from colleagues, patients, administrators, other office staff, insurance companies and laboratories (regarding test results). In addition, clinicians may receive AI-generated directives regarding tests, medication alerts and orders which may be either irrelevant or incorrect, as well as system software platform updates requiring time-sensitive training which is often rushed and may not be job-specific. These burdens directly increase clinicians' stress and leave them with less time for direct patient care.

EHR usability issues can transform simple tasks such as data entry, order writing and locating relevant patient history and data (especially from outside clinicians, hospitals and health systems) into complex undertakings. Considering the short time allotted to most patient visits today (which, in turn, are dictated by EHR scheduling programs), these tasks create undue stress that also adds to burnout.

EHRs create data overload, often because of poor data organization and the presentation of inappropriate job-specific data and irrelevant non-clinical data. Searching for organized relevant data in a significantly limited amount of time exacerbates clinician burnout and can also result in misguided treatment recommendations if important details are missed, further increasing the stress of managing care for patients and clinicians.

The clinician-patient relationship has always been considered a *sacred trust*, but that trust is eroded in multiple ways by the EHR. Many clinicians now face a computer screen instead of the patient and/or caregiver during visits, causing interruptions in the thought process of the clinician, uncomfortable pauses in conversations, and even possible mistrust by patients of the digital process that now dominates encounters.

The use of human scribes may decrease clinicians' stress but may also increase the physical and emotional distance between clinician and patient. The EHR further damages this relationship by potentially negatively influencing staff workflows such as scheduling, preauthorization processes, delays in medication prescription refills and others, which can delay treatment. Patients and caregivers may interpret these delays as representing a lack of care by the clinician, who is held responsible by the patient or caregiver. Often, the patient does not complain about these issues but begins to harbor resentment towards the clinician.

These EHR-related stresses can translate to adverse effects for clinician mental and physical wellbeing. A systematic review of available literature examined the question, "*What is the relationship between physician burnout and depression, anxiety, suicidality and substance abuse?*" Since the EHR has been shown to be a significant cause of physician burnout, this is certainly relevant to this research. The authors conclude, "The current systematic review presents findings suggestive of a significant association between both burnout and depression and burnout and anxiety in physicians and an important relationship between burnout and suicidality."

Burnout stress can also affect physical health, which is commonly manifested by exhaustion, sleep problems, increased susceptibility to infection, cardiovascular events and even suicide. In addition, it can negatively affect the clinician's professional and personal life. Relationships with colleagues, family and friends are damaged. Decreased job satisfaction can result in increased absenteeism and even leaving the profession, worsening clinician shortages which are already impacting society and healthcare. Such clinician departures, in turn, increase the burdens on remaining clinicians.

Patient care is also affected by clinician burnout. Increased medical errors and clinicians' disinterest or decreased empathy as a result of burnout cause patient mistrust and non-adherence to recommended treatment plans, which may contribute to worse patient outcomes.

In summary, EHRs can have a significant negative impact on individual clinicians, family and friends, colleagues, patients, caregivers and the entire healthcare system by increasing clinicians' burnout and eroding the unique clinician-patient bond that is at the heart of medicine.

This is the first of a three-part series highlighting the HIMSS Clinician Burden Reduction Toolkit's Inbox Workflow Improvement Plan. The second part of this series will further discuss the importance of addressing this problem. You can access the full Inbox Workflow Improvement Plan and other burden reduction surveys here.

References

- Ryan, E., Hore, K., Power, J., and Jackson, T. 2023.The relationship between physician burnout and depression, anxiety, suicidality and substance abuse: A mixed methods systematic review. *Frontiers in Public Health*. March 30. PMID: 37064688. doi:10.3389/fpubh.2023.1133484.
- Calandra, L., Parpia, C., Sriharan, A., Keefe, D.T. 2020. Electronic medical record-related burnout in healthcare providers: a scoping review of outcomes and interventions. *BMJ Open 12* (8), e060865. https://bmjopen.bmj.com/content/12/8/e060865.
- Gardner, R.L., Cooper, E., Haskell, J., et al. 2019. Physician stress and burnout: the impact of health information technology. *J Am Med Inform Assoc 26*(2), 106-114. https://pubmed.ncbi.nlm.nih.gov/30517663/.
- Shanafelt, T.D., Hasan, O., Dyrbye, L.N., et al. 2015. Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. *Mayo Clin Proc 91*(2): 276. DOI: 10.1016/j.mayocp.2015.08.023.