## Unmeaningful Work and the Practicing Physician

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ith its goals of improving the experience of care, improving the health of populations, and reducing the per capita cost of health care, the Triple Aim attempts to achieve what Donald Berwick and associates have described as high-value health care.<sup>1</sup> However, since its publication, several factors continue to confound the Triple Aim, including three of primacy: the decline of primary care, physician burnout, and the accumulating amount of unmeaningful work for the practicing physician.<sup>2</sup> These three also may be interdependent and irreducible, and each must be mitigated to facilitate attaining the Triple Aim goals.

The decline of primary care has been persistent and progressive, despite several ongoing interventions by national vanguard organizations. It is predicted to exacerbate future health care gaps in an aging population with a burden of chronic diseases.<sup>3,4</sup> Physician burnout has been well known for over two decades; however, only relatively recently has its downstream sequelae on patients, populations of patients, and the cost of care been better understood.<sup>5-7</sup>

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**Corresponding Author:** Joseph Edward Fojtik, MD, MPH, FACP, University of Illinois College of Medicine Rockford, Rockford, IL; email jefojtik@ outlook.com; ORCID ID 0000-0002-8403-7155 While these two factors have been welldescribed, unmeaningful work has not. There is a paucity of extant work defining unmeaningful work, expanding its lexicon beyond simple administrative tasks, or elucidating if it is an independent risk factor to the decline of other professions and disproportionally affects the generalist specialist more so than others.<sup>8,9</sup> Although there are currently no formal categories of unmeaningful work, three can be identified: unmeaningful work units, electronic frustrations, and redundant layers of complexity.

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primary care and physician burnout. Defining unmeaningful work and its taxonomy can facilitate a better understanding of how it relates to the decline of primary care and physician burnout and may act as a synergistic antagonist to the Triple Aim.

Any work associated with patient care can be meaningful. However, if that work is not license-level appropriate or does not contribute to direct patient care, it may be perceived as unmeaningful. Unmeaningful work can be further defined as cognitive work demanded upon a physician that is not license-level appropriate but is required to complete a clinical encounter, adds no clinical value for the patient or the physician, and acts as a barrier to care. Unmeaningful work for physicians may also be more than simple administrative tasks or routine workflow interruptions encountered by

Unmeaningful work units are the miscellaneous, unrelievable clerical tasks now omnipresent within clinical encounters. They may include the requirement of generalist specialists in some systems to perform written clerical referrals for patients to see other specialists due to the persistent and antiquated misinterpretation of the generalist specialist being a clerical gatekeeper versus a specialized coordinator of care.<sup>10,11</sup> Physicians also may be the only health care professionals in some systems allowed to enter computerized physician order entries due to the persistent misinterpretation of regulatory statutes,12 or perform clinically unnecessary box-checking to document certain arbitrary patient attributes to finalize orders within clinical encounters (euphemistically titled "The Revenge of the Ancillaries").13 Unmeaningful work units are ubiquitous, interwoven within the clinical encounter, and intrude into the cognitive space physicians need to complete that encounter.

Electronic frustrations are unique elements associated with the now widely perceived dysfunctional electronic health record (EHR) ecosystem and are disruptive to patient care. They include the generalized EHR attributes pervasively found within clinical encounters, subversively diverting the physician's attention from the patient to the computer, as repeatedly shown in time-motion studies.<sup>14,15</sup> They also may include the paradoxical EHR windowpopups physicians need to navigate during clinical encounters ("popup fatigue"),<sup>16,17</sup> or the excessive mouse movements and mouse clicks needed to complete simple clinical tasks ("click fatigue").<sup>18,19</sup>

Electronic frustrations also include physicians' interactions when searching for clinical data uniquely imbedded within the EHR. Concerns were raised early in the EHR's advent about these interactions, 20,21 centering on the deficiencies of what can be considered the three essential Rs of clinical data: the need for it to be reliable, relevant, and readily available. These concerns persist. Data erroneously entered in the EHR can be difficult to remove, unreliable, may not accurately describe the diagnostic process, and can lead to medical misadventures.<sup>22-25</sup> Clinical notes, generated by an EHR ecosystem complacent with cut and paste techniques,26 have become so excessively long and "note bloated" that they become irrelevant to subsequent treating physicians.<sup>27,28</sup> Physicians now spend extraneous amounts of time foraging across different electronic platforms within the EHR ecosystem for clinical data not readily available due to the promised EHR interoperability being unmet and incomplete.29,30 The introduction of the EHR to clinical practice has been correlated to physician burnout;31 electronic frustrations may also be the added independent risk factors to this relationship.

Redundant layers of complexity may include work required by health care entities for a physician to practice medicine within those entities in addition to state statutes. These statutes, including medical practice acts, ultimately define the requirements and boundaries within which a physician may practice medicine.<sup>32</sup> Redundant layers of complexity may include a requirement for physicians to complete discordant educational activities to work within an entity that are not required by a state's medical practice acts. They also include the disproportionate reliance health care entities place upon proprietary patient surveys, with the subsequent edicts attempting to change physicians' clinical behavior,<sup>33,34</sup> or the requirements for physicians to utilize overly complex or discordant diagnostic codes within the EHR,<sup>35,36</sup>

Unmeaningful work elements also include newly added administrative work burdens historically completed by others that are now presumed upon the physician during the "interstitial time between other work."<sup>37</sup> The unrestricted ability of unmeaningful work elements to enter into a clinical encounter and intrude into the cognitive space needed for the physician to complete that encounter is more worrisome than the elements themselves, and the widespread societal acquiescence of their presence infers that the medical profession has been little-prepared to protect the physician.

Medicine, as with other professions, draws its unity and authority with self-imposed and self-governed rules that over the millennia have evolved into ethics and codes of professionalism.<sup>38,39</sup> These ethics and codes define the profession by defining a high moral standard of conduct and professionalism expected of the physician toward his or her patients, fellow physicians, and society.40 However, to date, there is no ethical construct that defines its corollary specifically; no ethic conceptualizes a high moral standard of conduct expected of the profession and its associated health care entities toward the physician. An ethic that protects and preserves the physician and the physician's cognitive space relevant to patient care -- "The Physician Ethic" -- should be considered. Its conceptualization and further development may also mitigate the three confounding elements of the Triple Aim and is long overdue.

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## REFERENCES

1. Berwick DM, Nolan TW, Whittington J. The triple aim: care, health, and cost. *Health Aff (Millwood)*. 2008;27(3):759-769. doi:10.1377/hlthaff.27.3.759

**2.** Fojtik JE. The three confounding elements of the triple aim. *WMJ*. 2021;120(4):260-261.

3. Petterson S, McNellis R, Klink K, Meyers D, Bazemore A. The state of primary care in the United States: a chartbook of facts and statistics. Robert Graham Center. January 2018. Accessed August 1, 2022. https:// www.graham-center.org/content/dam/rgc/documents/ publications-reports/reports/PrimaryCareChartbook2021. pdf

 Colwill J, Cultice J, Kruse R. Will generalist physician supply meet demands of an increasing and aging population?. *Health Aff (Millwood)*. 2008;27(Suppl 1):232-241. doi:10.1377/hlthaff.27.3.w232

 West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. *J Intern Med.* 2018;283(6):516-529. doi:10.1111/joim.12752

**6.** Tawfik DS, Profit J, Morgenthaler TI, et al. Physician burnout, well-being, and work unit safety grades in relationship to reported medical errors. *Mayo Clin Proc.* 2018;93(11):1571-1580. doi:10.1016/j.mayocp.2018.05.014

7. Menon NK, Shanafelt TD, Sinsky CA, et al. Association of physician burnout with suicidal ideation and medical errors. *JAMA Netw Open*. 2020;3(12):e2028780. doi:10.1001/jamanetworkopen.2020.28780

**8.** Keller AC, Meier LL, Elfering A, Semmer NK. Please wait until I am done! Longitudinal effects of work interruptions on employee well-being. *Work Stress.* 2020;34(2):148-167. doi:10.1080/02678373.2019.1579266

**9.** Woolhandler S, Himmelstein DU. Administrative work consumes one-sixth of U.S. physicians' working hours and lowers their career satisfaction. *Int J Health Serv.* 2014;44(4):635-642. doi:10.2190/HS.44.4.a

**10.** Bodenheimer T, Lo B, Casalino L. Primary care physicians should be coordinators, not gatekeepers. *JAMA*. 1999;281(21):2045-2049. doi:10.1001/ jama.281.21.2045

11. Flynn KE, Smith MA, Davis MK. From physician to consumer: the effectiveness of strategies to manage health care utilization. *Med Care Res Rev.* 2002;59(4):455-481. doi:10.1177/107755802237811

**12.** American Medical Association. CPOE is order entry a physician-only EHR task?. 2022. Accessed October 31, 2022. https://www.ama-assn.org/system/files/regulatorymyths-cpoe.pdf

**13.** Gawande A. The upgrade: why doctors hate their computers. *New Yorker.* 2018;94(36):62-73. Accessed September 2, 2022. https://www.newyorker.com/magazine/2018/11/12/why-doctors-hate-their-computers

**14.** Arndt BG, Beasley JW, Watkinson MD, et al. Tethered to the EHR: primary care physician workload assessment using ehr event log data and time-motion observations. *Ann Fam Med.* 2017;15(5):419-426. doi:10.1370/afm.2121

**15.** Sinsky C, Colligan L, Li L, et al. Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties. *Ann Intern Med.* 2016;165(11):753-760. doi:10.7326/M16-0961

**16.** McCoy AB, Thomas EJ, Krousel-Wood M, Sittig DF. Clinical decision support alert appropriateness: a review and proposal for improvement. *Ochsner J.* 2014;14(2):195-202.

**17.** Nanji KC, Seger DL, Slight SP, et al. Medicationrelated clinical decision support alert overrides in inpatients. J Am Med Inform Assoc. 2018;25(5):476-481. doi:10.1093/jamia/ocx115

**18.** Hill RG Jr, Sears LM, Melanson SW. 4000 clicks: a productivity analysis of electronic medical records in a community hospital ED. *Am J Emerg Med.* 2013;31(11):1591-1594. doi:10.1016/j.ajem.2013.06.028

**19.** Collier R. Rethinking EHR interfaces to reduce click fatigue and physician burnout. *CMAJ*. 2018;190(33):E994-E995. doi:10.1503/cmaj.109-5644

20. Committee on Patient Safety and Health Information Technology; Institute of Medicine. *Health IT and Patient Safety: Building Safer Systems for Better Care*. National Academies Press (US); 2011. Accessed August 15, 2022. https://www.ncbi.nlm.nih.gov/books/NBK189661/

**21.** Slight SP, Berner ES, Galanter W, et al. Meaningful use of electronic health records: experiences from the field and future opportunities. *JMIR Med Inform.* 2015;3(3):e30. doi:10.2196/medinform.4457

**22.** Sittig DF, Singh H. Defining health information technology-related errors: new developments since to err is human. *Arch Intern Med.* 2011;171(14):1281-1284. doi:10.1001/archinternmed.2011.327

**23.** Bowman S. Impact of electronic health record systems on information integrity: quality and safety implications. *Perspect Health Inf Manag.* 2013;10(Fall):1c.

24. Balogh EP, Miller BT, Ball JR, Committee on Diagnostic Error in Health Care; Board on Health Care Services; Institute of Medicine. *Improving Diagnosis in Health Care*. National Academies Press (US); 2015. Accessed July 13, 2022. https://www.ncbi.nlm.nih.gov/ books/NBK338596/

**25.** Sittig DF, Wright A, Coiera E, et al. Current challenges in health information technology-related

patient safety. *Health Informatics J.* 2020;26(1):181-189. doi:10.1177/1460458218814893

**26.** Wang MD, Khanna R, Najafi N. Characterizing the source of text in electronic health record progress notes. *JAMA Intern Med.* 2017;177(8):1212-1213. doi:10.1001/jamainternmed.2017.1548

**27.** Tsou AY, Lehmann CU, Michel J, Solomon R, Possanza L, Gandhi T. Safe practices for copy and paste in the EHR. Systematic review, recommendations, and novel model for health IT collaboration. *Appl Clin Inform.* 2017;8(1):12-34. doi:10.4338/ACI-2016-09-R-0150

**28.** Chong AZ, Lee B, Hollenbach K, Kuelbs CL. Disappearing help text: implementing a note-based tool for in-line clinical decision support and note bloat reduction. *Appl Clin Inform.* 2022;13(5):1033-1039. doi:10.1055/a-1934-8323

29. Ommaya AK, Cipriano PF, Hoyt DB, et al. Carecentered clinical documentation in the digital environment: solutions to alleviate burnout. *NAM Perspect.* 2018:10.31478/201801c doi:10.31478/201801c
30. Zachary W, Maulitz RC, Zachary DA. What causes care coordination problems? A case for microanalysis. EGEMS (Wash DC). 2016;4(3):1230. doi:10.13063/2327-9214.1230

**31.** Kroth PJ, Morioka-Douglas N, Veres S, et al. Association of electronic health record design and use factors with clinician stress and burnout. *JAMA Netw Open*. 2019;2(8):e199609. doi:10.1001/ jamanetworkopen.2019.9609

**32.** Federation of State Medical Boards. Essentials of a state medical and osteopathic practice act. April 2015. Accessed September 4, 2022. https://www.fsmb. org/siteassets/advocacy/policies/essentials-of-a-state-medical-and-osteopathic-practice-act.pdf

**33.** Fenton JJ, Jerant AF, Bertakis KD, Franks P. The cost of satisfaction: a national study of patient satisfaction, health care utilization, expenditures, and mortality. *Arch Intern Med.* 2012;172(5):405-411. doi:10.1001/archinternmed.2011.1662

**34.** Zgierska A, Rabago D, Miller MM. Impact of patient satisfaction ratings on physicians and clinical care. *Patient Prefer Adherence.* 2014;8:437-446. doi:10.2147/ PPA.S59077

**35.** Diaz-Garelli F, Strowd R, Lawson VL, et al. Workflow differences affect data accuracy in oncologic ehrs: a first step toward detangling the diagnosis data babel. *JCO Clin Cancer Inform.* 2020;4:529-538. doi:10.1200/CCI.19.00114

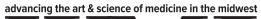
**36.** Butz J, Brick D, Rinehart-Thompson LA, Brodnik M, Agnew AM, Patterson ES. Differences in coder and physician perspectives on the transition to ICD-10-CM/ PCS: a survey study. *Health Policy Technol.* 2016;5(3):251-259. doi:10.1016/j.hlpt.2016.03.001

**37.** Sinsky CA. Implementing telemedicine in primary care: learning lessons from electronic health records. *Mayo Clin Proc.* 2020;95(9):1835-1837. doi:10.1016/j. mayocp.2020.07.017

**38.** Percival T. *Medical Ethics: Or, a Code of Institutes and Precepts Adapted to the Professional Conduct of Physicians and Surgeons.* S. Russell; 1803.

**39.** ABIM Foundation; ACP-ASIM Foundation; European Federation of Internal Medicine. Medical professionalism in the new millennium: a physician charter. *Ann Intern Med.* 2002;136(3):243-246. doi:10.7326/0003-4819-136-3-200202050-00012

**40.** American Medical Association. AMA code of medical ethics. Accessed August 16, 2022. http://ama-assn.org/ delivering-care/ethics/code-medical-ethics-overview





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