In Response: Physician Tolerance of Uncertainty



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W e appreciate your thoughtful comments and agree that prioritizing a systems approach to clinician burnout is critical, and the blame certainly should not lie with individual physicians. In general, our organizational approach to reducing burnout focuses on restoring meaning and joy to the practice of medicine at the individual, the practice, and in the institutional level.

One important area that needs attention and change is the healthcare system's infrastructure that is not currently set up to embrace uncertainty easily. As these comments thoughtfully address, there is a need for a systems approach to support the embracing of uncertainty at the institutional and operational level. Unfortunately at present, certainty is valued implicitly and explicitly in healthcare institutions, policies, and in the learning environment. For example, in many hospitals, admission from the emergency department to the in-patient unit requires a formal diagnosis to be entered in the patient's chart; and electronic health record systems require laboratory testing, imaging, and prescriptions to be associated with specific diagnoses in the record.

As these comments suggest, efforts to change the system are essential. Changes to support uncertainty could include more flexible diagnostic codes and treatment algorithms that build in uncertainty and room for modification over time; clinical decision support tools and electronic medical record systems that offer provisional diagnoses or better, and more flexibly, capture how diagnostic knowledge and certainty evolves over time, enabling a tolerance of uncertainty rather than undermining it.³ We must advocate for better ways to measure, assess, and train the management of uncertainty.⁴

A final means to thrive in the face of uncertainty is to see it as a natural starting point for system quality improvement in healthcare. Clinical uncertainty may unveil unnecessary variation, inconsistent practices, safety errors or near misses, or areas in which new knowledge or new processes are necessary. This is a natural precursor for improvement—health systems would do well to draw on the observations, questions, and ideas of trainees and physicians in practice to identify areas for future research, clinical practice or guideline development, or organizational

process improvement.⁵ Responding to the plethora of uncertainties that arise in the clinical environment in an adaptive way is one of the most important challenges facing clinicians, patients, and the healthcare system. A multi-faceted approach that offers both individual- and system-based strategies to embrace uncertainty could yield the most positive impact.

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REFERENCES

- Simpkin AL, Schwartzstein RM. Tolerating Uncertainty The Next Medical Revolution? N Engl J Med. 2016;375(18):1713-5.
- Bhise V, Rajan SS, Sittig DF, Vaghani V, Morgan RO, Khanna A, et al. Electronic health record reviews to measure diagnostic uncertainty in primary care. J Eval Clin Pract. 2018;24(3):545-51.
- Lanham HJ, Sittig DF, Leykum LK, Parchman ML, Pugh JA, McDaniel RR. Understanding differences in electronic health record (EHR) use: linking individual physicians' perceptions of uncertainty and EHR use patterns in ambulatory care. J Am Med Inform Assoc. 2014;21(1):73-81.
- Gheihman G, Johnson M, Simpkin AL. Twelve tips for thriving in the face of clinical uncertainty. Med Teach. 2019:1-7.
- Blumenthal D. Performance improvement in health care-seizing the moment. N Engl J Med. 2012;366(21):1953-5.

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