



Physician Burnout, Interrupted

Pamela Hartzband, M.D., and Jerome Groopman, M.D.

Before the onset of the Covid-19 pandemic, each day seemed to bring another headline about the crisis of physician burnout. The issue had been simmering for years and was brought to a boil

by mounting changes in the health care system, most prominently the widespread implementation of the electronic health record (EHR) and performance metrics.¹ Initially, the prevailing attitude was that burnout is a physician problem and that those who can't adapt to the new environment need to get with the program or leave. Some dismissed the problem as a generation of "dinosaur" doctors whining and pining for an inefficient, low-tech past. But recently, it has become clear that millennials, residents, and even medical students are showing signs of burnout. The unintended consequences of radical alterations in the health care system that were supposed to make phy-

sicians more efficient and productive, and thus more satisfied, have made them profoundly alienated and disillusioned. The problem has become even more urgent with the realization that it's costing the health care system approximately \$4.6 billion a year.²

Solutions have largely targeted the doctor, proposing exercise classes and relaxation techniques, snacks and social hours for decompressing, greater access to child care, hobbies to enrich free time, and ways to increase efficiency and maximize productivity. There is scant evidence that any of these measures have had a meaningful impact, as shown by a recent meta-analysis of 19 controlled studies evaluating a total

of more than 1500 physicians.³ These data lead to the inescapable conclusion that currently proposed solutions do not address the underlying problem: a profound lack of alignment between caregivers' values and the reconfigured health care system. A largely neglected field of organizational psychology provides an explanation and a roadmap for ameliorating physician burnout.

Seminal work by Gagné and Deci examined motivation in the workplace.⁴ The researchers classified motivation as intrinsic or extrinsic: people may perform an activity because they find it interesting and derive spontaneous satisfaction from the activity itself (intrinsic motivation); or they may receive a tangible external reward, so that satisfaction comes not from the activity itself but from that reward (extrinsic motivation). One might imagine that intrinsic and extrinsic motivators

would have additive or even synergistic effects. But Gagné and Deci showed that tangible extrinsic motivators, such as monetary rewards, can paradoxically undermine intrinsic motivation. Such unexpected effects occur particularly among professionals who undertake complex tasks requiring cognitive flexibility, creativity, and problem solving.

Medicine is in many ways unique. Doctors, nurses, and other health care professionals have traditionally viewed their work as a calling. They tend to enter their field with a high level of altruism coupled with a strong interest in human biology, focused on caring for the ill. These traits and goals lead to considerable intrinsic motivation. In a misguided attempt to improve the medical system, health care reformers put into place various positive and negative extrinsic motivators, without realizing that they would actually erode and destroy intrinsic motivation, eventually leading to “amotivation” — in other words, burnout.

Reformers are perplexed that monetary incentives haven't worked to prevent or remedy burnout. Using a monetary reward as a central motivation strategy seems practical and appealing. However, in a recent survey of more than 15,000 doctors in 29 specialties (Medscape National Physician Burnout and Suicide Report 2020), half the doctors said they would give up at least \$20,000 in annual income in order to reduce their work hours; these doctors included millennials, who are among the lowest earners. It's important to emphasize that money in and of itself is not toxic; Gagné and Deci observed that an increase in yearly salary or a bonus does not

diminish intrinsic motivation. But bringing money to the fore in each individual patient interaction — by translating physicians' work into relative value units, for example — does.

Gagné and Deci posit that there are three pillars that support professionals' intrinsic motivation and psychological well-being: autonomy, competence, and relatedness.³ All three have been stripped away as a direct result of the restructuring of the health care system.¹

Autonomy, according to Gagné and Deci, means having the right to act with a sense of volition and having the experience of choice. Physicians now endure a profound lack of control over their time and even language. The amount of time we spend with a patient, what is discussed (even to the point of uniform scripts), and how a visit is documented are all frequently mandated. We are further controlled by surveillance in the form of time and motion studies and timing of our use of the EHR.

Competence was once viewed as having a deep fund of medical knowledge and exercising clinical judgment appropriately with each patient. Under recent health care reforms, it has been redefined as compliance with various metrics, many of which are not evidence-based. Competence has also become a matter of checking off boxes in the EHR and satisfying insurers' demands by quickly placing a note in the record for billing purposes, even if it's incomplete or erroneous. In defense, many doctors now add a disclaimer that the note has not been proofread and to “disregard any errors.”

Relatedness is the psychologi-

cal feeling that one belongs, has interpersonal attachments, and is connected to the social organization. Doctors want to give patients the time and support they need, and they want the system to value and recognize their efforts to provide this kind of care. While much lip service is given to “patient-centered care,” many doctors feel that the system is increasingly driven by money and metrics, with rewards for professionals who embrace these priorities.

Medicine's daily tasks have become Sisyphean. Physicians recognize that it's impossible to satisfy the current system's demands. If you surrender, the joy of engaging with your patients is diminished and ultimately lost. If you resist, you incur the system's wrath. Doctors are finally expressing the pain they feel. Emily Silverman, a hospitalist at the University of California, San Francisco, recently bemoaned in the *New York Times* “the relentless reminders of tasks we haven't completed, supplications to correct our documentation for billers, and daily, jaundiced reminders: You are currently deficient.”

Burnout is toxic for patients as well as physicians, because it's associated with loss of empathy, impaired job performance, and increases in medical mistakes.⁵ Family and friendships also suffer as the EHR's demands invade doctors' homes and consume the time once enjoyed in vital relationships, worsening emotional exhaustion.

The problem of burnout will not be solved without addressing the issues of autonomy, competence, and relatedness. Evidence from the meta-analysis of controlled interventions supports the restoration of autonomy; giving

doctors flexibility in their schedule to allow for individual styles of practice and patient interaction was one of the few system solutions that reduced burnout.³ Flexibility in scheduling recognizes that both patients and doctors are individuals, and some interactions simply take longer than others. The EHR, initially lauded for its potential as a repository of patient information, has become a tyrannical, time-consuming billing tool; it must be reconfigured to work for physicians rather than forcing physicians to work for it.

 An audio interview with Dr. Hartzband is available at NEJM.org

Competency can be restored by purging the system of meaningless metrics while maintaining a core of evidence-based measures, allowing for clinical judgment, and honoring individual patient preferences. Relatedness should be authentic, aligning the system's values with those of physicians, nurses, and other health care professionals who chose their careers out of altruism. Restoring

these three pillars will support the return of intrinsic motivation.

With the Covid-19 pandemic, medicine is at a crisis point. Health care professionals are responding with an astounding display of selflessness, caring for patients despite the risk of profound personal harm. Our efforts are recognized and applauded. During this interlude filled with uncertainty, there has been a sense of altruism and urgency that has unexpectedly catalyzed the restoration of some elements of autonomy, competency, and relatedness. Indeed, the whole medical system, including hospital administrators and insurers, among others, has rallied to support the caregivers. But will these positive changes be sustained? Tectonic shifts are at work as hospitals and clinics suffer grave financial losses and the workforce is diminished by illness and exhaustion. As the current crisis ultimately abates, we need to remember the lesson that the system can be reset. It is time to evaluate what has worked and

what hasn't in health care reform. We must not return to the former status quo.

Disclosure forms provided by the authors are available at NEJM.org.

From Beth Israel Deaconess Medical Center and Harvard Medical School — both in Boston.

This article was published on May 1, 2020, at NEJM.org.

1. Friedberg MW, Chen PG, Van Busum KR, et al. Factors affecting physician professional satisfaction and their implications for patient care, health systems, and health policy. *Rand Health Q* 2014;3:1.
2. Han S, Shanafelt TD, Sinsky CA, et al. Estimating the attributable cost of physician burnout in the United States. *Ann Intern Med* 2019;170:784-90.
3. Panagioti M, Panagopoulou E, Bower P, et al. Controlled interventions to reduce burnout in physicians: a systematic review and meta-analysis. *JAMA Intern Med* 2017; 177:195-205.
4. Gagné M, Deci EL. Self-determination theory and work motivation. *J Organiz Behav* 2005;26:331-62.
5. Panagioti M, Geraghty K, Johnson J, et al. Association between physician burnout and patient safety, professionalism, and patient satisfaction: a systematic review and meta-analysis. *JAMA Intern Med* 2018;178:1317-30.

DOI: 10.1056/NEJMp2003149

Copyright © 2020 Massachusetts Medical Society.

Kinder, Gentler Dementia-Friendly Alzheimer's Care

Julie R. Ingelfinger, M.D.

Many of us navigate the issues surrounding dementia (most often Alzheimer's disease) without enough advance planning, forethought, or help. My family's story is not unusual: as my mother entered her late 90s, her long-sharp intellect lost its edge. She no longer did the *New York Times* crossword puzzle in ink, and she began misplacing her keys with alarming frequency.

She was painfully aware of it, saying, "It's as if my thoughts are locked in a black, lacquered box to which I have lost the key." We ascribed these changes to an episode of delirium at age 94 after a bleeding peptic ulcer led to an impressive anemia and a small pontine infarct. But she had recovered quickly, returning to computer use and driving.

By 99, however, she was in a

constant mental fog. We hired private aides, an expensive proposition that drained her funds. When she became more confused and sometimes belligerent, we found a memory unit that anticipated her decline and provided incrementally increasing care. She made a cogent speech at her 100th birthday celebration, but she faded soon thereafter.

In fact, my mother had wor-