



# Bending the Curve on Healthcare Providers' Burnout

Mazur L<sup>1\*</sup> and Charguia N<sup>2</sup>

<sup>1</sup>Division of Healthcare Engineering, Department of Radiation Oncology, UNC School of Medicine, USA

<sup>2</sup>Department of Psychiatry, School of Medicine & Integrated Well-being Program, UNC Healthcare, USA

## Introduction

We are facing an unprecedented healthcare delivery crisis as more than three-quarters of frontline healthcare providers are now reporting burnout and leaving their jobs [1]. Approximately 330 thousand healthcare providers left their jobs in 2021 alone [2] and many decided to retire. That translates to about one in five healthcare providers leaving their jobs, with projections of 50% of healthcare providers plan to leave their positions by 2025 [3]. Furthermore, the average age of a nurse and nurse practitioner is approximately 57 and about 45% of physicians are over 55 and more than 40% of active physicians will be 64 or older in the next 10 years [4]. Perhaps, the only way to describe the current situation in the US healthcare system is as 'the sky in falling and we must do something now'.

Burnout itself, as an occupational phenomenon, is characterized by exhaustion, mental distance from work, feelings of negativism or cynicism about work, and reduced efficacy at work [5]. Experts have described healthcare providers' burnout as a public health crisis that has reached global epidemic levels even before the COVID-19 pandemic. The pandemic has added extra pressure as physicians try to balance responsibilities to their families as well as obligations to their organizations and patients. The consequences of burnout are numerous and concerning, with risks that impact personal, social and occupational health. Individual risks of burnout include potentiating depression, addiction, the deterioration of physical health as well as increasing the risk for self-harm and suicide. An additional risk of burnout is the impairment of cognitive processes, which not only impacts the individual, but also has numerous ramifications on our healthcare systems, including may increase the risk for committing medical errors, which may then endanger patient safety and result in patient harm.

You may ask, is there any hope to improve this overwhelming situation? Our experiences at the University of North Carolina – Chapel Hill suggests that significant improvements are possible. Over the last few years, we have been applying and learning how to employ systems analysis and thinking to deal with burnout issues. We have based our approach on the National Academy of Medicine (NAM) conceptual framework that utilizes a systems approach to identify contributing factors to healthcare professionals' burnout and overall professional well-being. In the nutshell, the framework considers three interacting system levels i) front-line care delivery, ii) healthcare organization, and iii) external environment (Figure 1); all interacting together to influence burnout. A systems approach to reducing burnout and improving well-being requires identifying key contributing factors at any of the three levels, or combinations of factors that can yield the highest return on investment and guide the optimal allocation of scarce resources to mitigate and prevent physician burnout. Below, we briefly outline the exact methods used in our efforts and describe some key insights into some unique opportunities to reduce burnout and improve the well-being of healthcare providers.

We conducted our analysis with hospitalists, cardiologists, surgeons, oncologists, emergency department physicians, nurses, residents, and fellows all involving over 350 healthcare providers in the process. The projects were sponsored by the UNC Healthcare Integrated Well-being Program. For each project, the systems approach utilized a five-stage, sequential, mixed methods design to identify work system factors that contribute to burnout. an anonymous 25-item survey was administered to elicit demographics, measure levels of burnout and resilience, and provides everity ratings of work place stressors and their improvement priorities based on the NAM theoretical model of burnout. Second, focus groups were conducted to gather contextual information about the key factors contributing to burnout. contextual inquiries (a form of on-site shadowing) ranging from 4 h to 8 h provided an even more in-depth understanding of the key breakdowns that were identified by the survey and focus groups. participants validated the data presented through models and

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### \*Correspondence:

Lukasz Mazur, Division of Healthcare Engineering, Department of Radiation Oncology, UNC School of Medicine, North Carolina, USA,  
E-mail: lukasz\_mazur@med.unc.edu

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provided their top priorities for improvement. Finally, participants rated the top priorities for their levels of impact and effort, and these were used to determine the final recommendations. Below, using the pooled data across all our efforts, we present the key findings, with the highest priority factors at the top. In this process, we gained a set of sensible insights regarding what healthcare providers need to reduce burnout and improve well-being.

### Moral distress

Healthcare providers have been extending their personal lives beyond what is possible - delivering treatments and services to patients and families at all costs. We learned that moral distress affects both individuals and organizations. At the individual level, negative moral distress can produce signs that are emotional (e.g., frustration, anxiety, withdrawal), physical (e.g., muscle aches, headaches, vomiting), and psychological (burnout, depression, post-traumatic stress disorder) in nature. Repeated episodes of moral distress that aren't resolved can accumulate as moral residue, with healthcare professionals ultimately experiencing burnout and leaving their jobs- or even their careers. Moral distress occurs when a healthcare provider knows the right action to take, but is somehow constrained from taking it. Moral distress is different from an ethical dilemma in which one recognizes that an issue exists, and that two or more ethically justifiable but mutually opposing actions can be taken. Our recommendation for healthcare leaders is to invest in developing systems that address issues related to moral distress [6]. For example, leaders can promote systems that promote and support the 4 A's approach.

**ASK:** Review the definition and symptoms of moral distress and ask yourself whether what you are feeling is moral distress. Are your coworkers exhibiting signs of moral distress as well?

**AFFIRM:** Affirm your feelings about the issue. What aspect of your moral integrity is being threatened? What role could you (and should you) play?

**ASSESS:** Begin to put some facts together. What is the source of your moral distress? What do you think is the "right" action and why is it so? What is being done currently and why? Who are the players in this situation? Are you ready to act?

**ACT:** Create a plan for action and implement it. Think about potential pitfalls and strategies to get around these pitfalls. Such systems, when in place, can help healthcare providers proactively seek resolutions to moral distress issues before they become too big to deal with.

### Excessive workload

With the current staffing issues, the amount of work to be performed simply exceeds the time in which healthcare professionals can do the work. This chronic high level of physical and mental workload combined with divided attention, feeling rushed, information and communication overload, and cross-coverage are resulting in suboptimal patient safety and care delivery. Our recommendation is that healthcare leaders should invest in a better understanding of the association between workload and performance and therefore quality and patient safety, and take necessary steps to ensure systems are prepared to operate safely under both optimal and low staffing models. The new systems must be creatively developed and implemented for low staffing levels. This might require the use of innovative technologies and clinical care protocols.

### Patient factors

Patients and families have been experiencing a tremendous

amount of stress, which unfortunately translated into often intense verbal and physical abusive behaviors in healthcare settings. Nearly 80% of adults say the coronavirus pandemic is a significant source of stress in their life [7]. Nearly 50% of adults report their behavior has been negatively affected resulting commonly in tension in their bodies (21%), getting angry very quickly (20%), experiencing unexpected mood swings (20%), in addition to screaming or yelling at a loved one (17%) [8]. This is further elevated by recent unprecedented social stressors including extreme racial incited violence, rampant mass shootings, exacerbation of climate change/global warming, rise in suicide rates, immigration issues, widespread sexual harassment/assault reports in the news, the devastating opioid/heroin epidemic. Overall, this highlights the hardships many Americans may be confronting at this moment. Our recommendation is that healthcare leaders immediately invest in engineering (e.g., metal detectors), process (e.g., law enforcement individuals), and policy (e.g., clear expectations and accountability) for patients and families, similar to systems developed by the aviation industry, to prevent harm. Long term, we recommend that healthcare leaders consider investing in prevention strategies to help close the gap in the rising mental health crisis.

### Organizational culture

Frontline healthcare workers are faced with the dilemma of living up to unrealistic productivity measures while being asked to deliver high-quality excellent care. The productivity measures are often negatively affected by suboptimal interpersonal relationships with outside group colleagues across disciplines (e.g., co-worker incivility, bullying or abuse, lack of inter-relational coordination, and communication). There is also a lack of operational and social support from the administration leading to negative feelings regarding fairness/equity in organizational policies and procedures. This indeed is a very complex issue and one extremely hard to solve. Our recommendation is that healthcare leaders invest in efforts to better integrate their education, quality, safety, risk, and well-being improvement programs. These programs must work synergistically to help produce the culture and values we aspire to. One approach could be to develop a shared vision for zero preventable harm for patients and staff where the personal and professional well-being of our healthcare providers is at the center of attention (e.g., acknowledging struggles with work-life integration, work-home conflict, child-care concerns; schedules do not allow sufficient time away from the office, pajama time, joy at work, feeling respected).

### Job control/autonomy

There is a low sense of control over autonomy on how one should perform work duties under low staffing levels. Such lack of involvement and engagement in shared governance (e.g., not having an influence on institutional policies) is causing frontline healthcare providers to assume a lack of respect leading in the long term to significant decrements in loyalty towards the organization. Under current productivity pressures, there is also a lack of protected time for professional development, research, teaching, and quality improvement activities, which directly impacts the ability to feel fulfilled and connected to one's profession. Our recommendation is that healthcare leaders invest in local department-level multidisciplinary teams that support organizational learning and problem-solving. These teams should be intertwined with organizational infrastructures supporting policy and procedure decisions, as well as the day-to-day improvement work on overall quality improvement. Examples of such local learning teams include

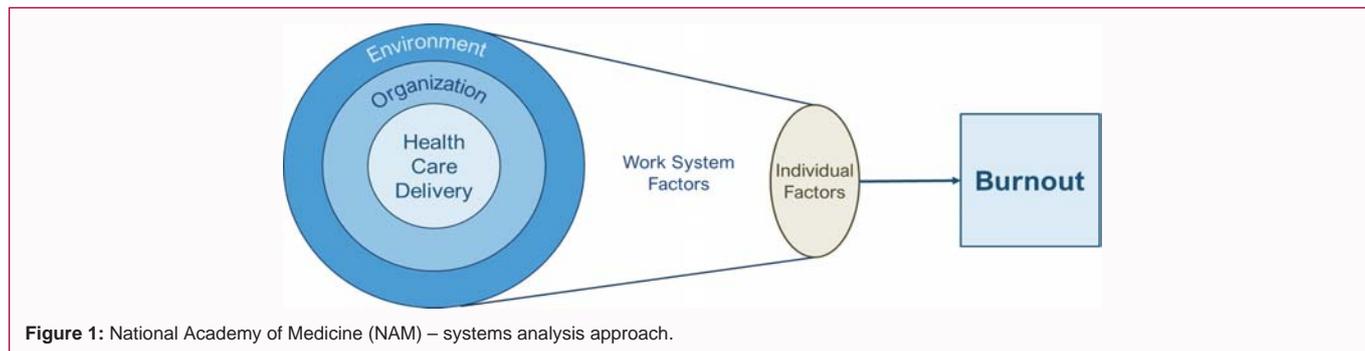


Figure 1: National Academy of Medicine (NAM) – systems analysis approach.

patient safety events analysis meetings, learning from defects, daily huddles, and continuous improvement efforts. Examples of the infrastructure include risk and patient safety committees responsible for conducting root-cause analysis on harm-related events, tiered huddle systems for issue escalations from the local team to executive leadership on a daily basis [9], and overarching quality monitoring committees.

### Concluding remarks

While many factors contribute to burnout, our data and experiences suggest that the burnout epidemic can be best addressed by addressing issues related to moral distress, excessive workload, patient factors, organizational culture, and job control/autonomy. Healthcare leaders must work relentlessly to address this ongoing crisis as a part of the recovery plan. We, the authors of this editorial, stay most optimistic that improvements can be done and that we will emerge stronger and smarter from this crisis. Let's never let a crisis go to waste.

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### References

1. Al-Ghunaim TA, Johnson J, Biyani CS, Alshahrani KM, Dunning A, O'Connor DB. Surgeon burnout, impact on patient safety and professionalism: A systematic review and meta-analysis. *Am J Surg*. 2022;224(1):228-38.
2. Audis B, Damayanti S. Evaluation of burnout and work-life in surgical trauma acute care units. *J Trauma Nurs*. 2020;27(4):200-6.
3. Brown C, Joseph BA, Davis K, Jurkovich GJ. Modifiable factors to improve work-life balance for trauma surgeons. *J Trauma Acute Care Surg*. 2021;90(1):122-8.
4. Coombs DM, Lanni MA, Fosnot J, Patel A, Korentager R, Lin IC, et al. Professional burnout in united states plastic surgery residents: is it a legitimate concern? *Aesthet Surg J*. 2020;40(7):802-10.
5. Cunningham CT, Quan H, Hemmelgarn B, Noseworthy T, Beck CA, Dixon E, et al. Exploring physician specialist response rates to web-based surveys. *BMC Med Res Methodol*. 2015;15:32.
6. Maslach C, Jackson SE, Leiter MP. Maslach Burnout Inventory: Third edition. In: Zalaquett CP, Wood RJ, editors. *Evaluating Stress: A Book of Resources* (pp. 191-218). Scarecrow Education. 1997.
7. Mehrzad R, Akiki R, Crozier J, Schmidt S. Mental health outcomes in plastic surgery residents during the COVID-19 pandemic. *Plast Reconstr Surg*. 2021;148(2):349e-50e.
8. National Academies of Sciences, Engineering, and Medicine (NAM). *Taking Action Against Clinician Burnout: A Systems Approach to Professional Well-Being*. Washington, DC: The National Academies Press. 2019.
9. Ribeiro RVE, Martuscelli OJD, Vieira AC, Vieira CF. Prevalence of burnout among plastic surgeons and residents in plastic surgery: A systematic literature review and meta-analysis. *Plast Reconstr Surg Glob Open*. 2018;6(8):e1854.
10. Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, et al. Burnout and medical errors among American surgeons. *Ann Surg*. 2010;251(6):995-1000.
11. The Lancet. Physician Burnout: A global crisis. *The Lancet*. 2019;394(10193):93.