



Physician Burnout—A Leading Indicator of Health System Performance?

See also pages 1625 and 1688

Like the proverbial canary in the coal mine that alerts miners to the need for course correction, physician burnout provides an early indicator of health system dysfunction in time for decision-makers to change course and avoid health system failures. In this issue of *Mayo Clinic Proceedings*, Sinsky et al¹ report that physicians may be exiting their careers in medicine faster than they enter; their intentions to withdraw are highly correlated with burnout (odds ratio [OR] 5.8). Also in this issue, Shanafelt et al² advocate to proactively monitor and manage professional burnout and wellbeing in individuals as a way to avert crises. To this end, they offer an organizational blueprint for duplicating the Mayo Clinic Office of Staff Services [OSS], and explain how to reduce the barriers for professionals seeking support.

By monitoring burnout, threats may be identified and addressed in a cost-effective manner before disrupting patient care. As Sinsky et al describe, if a third of the physicians follow through with their intention to re-route into a different career in the next 2 years, the United States stands to lose 4762 physicians (equivalent to eliminating the graduating class from 19 medical schools for 2 years, assuming 125 students per class). Whereas, the 11 medical schools built between 2001-2011, at an estimated cost of \$100 million each, added 784 medical graduates in 2016. Losses may outpace gains. This would exacerbate the physician shortfall of 45,000 to 90,000 expected by 2025, and impede patients' access to care.

Clinical Practice Tied to Burnout

Physicians' work or their workplaces put them at risk for burnout. Burnout is a syndrome of emotional exhaustion and depersonalization.³ Compared with the general population, physicians enter clinical practice healthy, with a higher quality of life, lower rates of burnout and depression,⁴ and lower rates of cancer and cardiovascular disease.⁵ Once in practice, they register lower work-life satisfaction (40.9% vs

61.3%) and higher rates of burnout (54.4% vs 28.4%),⁶ and the risk of suicide becomes 1.4 and 2.3 times higher for male and female physicians, respectively.⁷ The fact that burnout increased across all medical specialties between 2011 and 2014, while remaining stable in the general population, is further evidence that this is a workplace issue. Exposure to clinical work hours demonstrates a dose effect with burnout, thereby suggesting cause and effect.⁶ Most physicians are now employed in large hospital organizations and may not have the authority to resolve this without organizational leadership. Indeed, there is an emphasis on institutional strategies to alleviate burnout and its adverse consequences.^{8,9} In this issue of *Mayo Clinic Proceedings*, Sinsky et al¹ and Shanafelt et al² describe how surveying for burnout in health systems and individuals can avert crises and improve performance.

Physically Withdrawing From Clinical Practice

Sinsky et al¹ reported burnout as the factor most strongly related to physicians' plans to withdraw from the clinical workforce by reducing to part-time within the next 12 months (19.8%); leaving the clinical workforce within the next 2 years by retiring (9.9%), rerouting their careers into nonclinical work (2.6%), or rerouting into a different career altogether (1.9%); entering a revolving door of different practice opportunities in search of satisfaction (9.3%); or a combination of these (2.7%). Turnover costs are estimated to be \$800,000 per physician. Still, there are additional ways that physicians physically withdraw from clinical practice. They may restrict their scope of practice to avoid clinical stressors (eg, fewer obstetricians/gynecologists may deliver babies and fewer primary care physicians may accept insurance). The risk of suicide accounts for 300 to 400 physicians lost each year.¹⁰ Withdrawal from clinical work is protective against burnout but may potentiate burnout in the remaining physicians by

shifting work. Physician withdrawal from clinical work has adverse effects on access, continuity of care, patient satisfaction, productivity, and costs.

The analysis by Sinsky et al¹ was conducted with 6695 practicing physicians sampled from and similar to the 835,451 physicians in the American Medical Association Physician Masterfile, a nearly complete record of all the physicians in the United States. The Canadians performed a similar analysis using the Canadian Medical Association Masterfile of 70,000 physicians and found that the cost of reduced work hours and early withdrawal from practice directly attributable to burnout was CaD\$213.1 million; 58.8% could be attributed to family physicians. Family physicians represent most physicians; they see nearly twice as many patients per hour at approximately half the cost per service and are more likely to reduce or withdraw from practice at an earlier age compared with surgeons and specialists.¹¹ The physician workforce in the United States is 12 times the size of that in Canada, with 2.6 times the prevalence of burnout using more inclusive criteria and potentially higher costs per service.

Psychologically Withdrawing From Clinical Practice

Burned-out physicians who are not able to physically withdraw from clinical practice may be unable to modulate their well-being and, therefore, may psychologically withdraw. A burned-out physician may lack empathy or the cognitive vigilance required to prevent errors. Burned-out physicians perceive that they make more errors, and self-perceived errors portend more burnout, suggesting a reciprocal relationship.¹² Physician stress reduction has the potential to reduce malpractice claims by two-thirds,¹³ an average of \$371,054 per claim.¹⁴ Frontline disciplines are most affected by burnout and malpractice claims. They may be at increased risk for substance abuse, suicide, and troubled relationships.⁸ A burned-out physician workforce may be less efficient and more costly if they are prone to reducing their pace, resisting work, rebelling against bureaucratic tasks with workarounds,¹⁵ or reluctant to engage in organizational initiatives. Physically present but psychologically withdrawn, a burned-out workforce may have adverse effects on quality and

safety, patient satisfaction, efficiency, productivity and costs.

Support Individual Performance

Shanafelt et al² aimed to proactively secure the well-being of the professional workforce. Typically, the OSS at Mayo Clinic provides 75% of their eligible staff with financial services and 5% to 7% with peer support as needed. In this study, 39 professionals were invited to schedule an appointment without a perceived need, and 26 accepted. A brief previsit checklist introduced potential topics to be discussed. The financial planners met each participant and were trained to encourage a visit with peer support. Of the 77% who accepted peer support, the following topics were discussed: work-life integration (38%), career satisfaction (29%), self-care (8%), and personal medical needs (0%). All the participants found the checkup helpful and satisfying, and 84% endorsed the proactive checkup annually at a minimum.

Based on 15 years' experience, the OSS recommends exercising care to minimize stigma and barriers for professionals seeking help; professionals may be averse to appearing imperfect or vulnerable. The OSS chose a location near the lobby, away from entities related to mental health, employee assistance, human resources, and administrative offices related to professional misconduct. The OSS is managed by a medical director. It maintains the strictest confidentiality, with no identifying information and minimal notes; the notes are not discoverable in a lawsuit. The OSS fosters familiarity by meeting with new hires and new chairpersons and by promoting the OSS widely. Financial planners help manage high debt burdens, retirement, taxes, insurance, investing, and other financial concerns, thus normalizing visits. The traffic to the financial planners obscures visits to peer support. The peer support panel assists with a range of personal and professional services to improve well-being in work-life, enabling physicians to focus on patient care involving high-stakes decision making and long hours.

Stigmatizing of physicians who experience burnout should be avoided. Although lack of cognitive vigilance may lead to errors, errors are not necessarily attributable to burned-out individuals. A burned-out workforce may indicate a system prone to errors. It is plausible that physicians who are most cognitively vigilant and

TABLE. R-Factors: Physicians' Reactions to Burnout

Type of reaction	R-factors
Physically withdrawing from clinical practice	Reduce work effort (hours) Retreat (paid time off, sick days) Retire early Reroute career (leave career in medicine altogether) Reroute career (nonclinical: administrative, research, etc) Restrict scope of practice (avoid stressful work) Revolving door (recruiting and retaining) Risky (suicide)
Psychologically withdrawing from clinical practice	Reduce work effort (productivity) Resist (work stoppages, incentives to motivate work, etc) Rebel (work-arounds, manipulations to bypass hassles) Reluctant (disengaged from organizational initiatives, innovation, and improvement) Reckless (lack of cognitive vigilance, resulting in errors) Risky (substance abuse, broken relationships, suicidality, etc)

committed to providing safe, high-quality, patient-centered care are especially prone to burnout if their efforts are frustrated by a dysfunctional system; they may thus withdraw. These physicians may be the ones who organizations want to retain. Physician burnout may be the best early indicator of system dysfunction, before errors can occur.

Support Health System Performance

Sinsky et al¹ highlighted a selection of stressors found in the clinical workplace that contribute to burnout: loss of control and flexibility, inefficient processes (the electronic health record, computer physician order entry, clerical burdens), and poor work-life integration. Burnout was most highly correlated with physicians' intent to reduce work hours and their intent to leave clinical medicine (OR=1.81 and OR=2.16, respectively). Work-life integration was also more correlated with the intent to reduce work hours (OR=1.65), and the electronic health record was more highly correlated with the intent to leave one's current practice (OR=1.57). Of those who planned to reduce their work hours, 28.6% wanted to spend more time with family and 26.2% were frustrated with the work environment. Achieving workplace efficiency with the electronic health record, computer physician order entry, or clerical work will likely require a concerted sustained effort with major stakeholders.

Monitoring physician burnout can detect dysfunction in the health system before it affects

patient care. The process of withdrawing physically or psychologically (Table) is a mechanism by which physician burnout interferes with the process of providing the population access to cost-effective, safe, high-quality, patient-centered care. As such, physician well-being is also an important quality indicator. Burnout detectors can be used to evaluate the workplace for instigators and drivers of the burnout phenomenon. Monitoring physician well-being is especially important now that most physicians are employed in large organizations and may lack authority to act independently. In this issue of *Mayo Clinic Proceedings*, Sinsky et al¹ and Shanafelt et al² demonstrate the value of tending to the well-being of systems and individuals.

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