

Physician Burnout - Annotated Bibliography

The evidence-based literature on physician burnout is growing. We recommend browsing the National Academy of Medicine (NAM) Clinician Well-Being Knowledge Hub (<https://nam.edu/clinicianwellbeing>) for an up-to-date review of the literature.

Selected Articles

Han S, Shanafelt TD, Sinsky CA, Awad KM, Dyrbye LN, Fiscus LC, Trockel M, Goh J. Estimating the Attributable Cost of Physician Burnout in the United States. *Ann Intern Med.* 2019; 170:784-90.

Summary: This article sought to estimate burnout-associated costs related to physician turnover and physicians reducing their clinical hours at national and organization levels in the United States. A conservative estimate from this study suggests that \$4.6B in costs related to physician turnover and reduced clinical hours is attributable to burnout each year in the United States. The annual economic cost associated with burnout related turnover and reduced clinical hours is approximately \$7.6K per employed physician each year.

Noseworthy J, Madara J, Cosgrove D, Edgeworth M, Ellison E, Krevans S, et al. Physician Burnout Is a Public Health Crisis: A Message to Our Fellow Health Care CEOs. *Health Affairs Blog [Internet].*

Summary: A letter outlining CEO commitments and a call to action. These CEOs committed to: (1) regularly measuring the well-being of their physician workforces; (2) including measures of physician well-being in institutional performance dashboards; (3) evaluating and tracking institutional costs of physician turnover, early retirement and reductions in clinical effort; (4) emphasizing importance of leadership skill development for physicians and managers leading physicians; (5) understanding and addressing more fully the clerical burden and inappropriate allocation of work to physicians; (6) supporting collaborative, team-based models of care; (7) encouraging government/regulators to address the increasing regulatory burden that is driving inefficiency, redundancy and waste in the healthcare system; (8) encouraging and supporting national organizations to work with regulators to align technology and policy; (9) encouraging development of initiatives and best practices in this area; (10) continuing to educate fellow CEOs and other stakeholders about importance of reducing burnout and improving well-being of physicians; (11) and supporting the use of organizational research to determine the most effective policies and interventions.

Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med.* 2012; 172: 1377-85.

Summary: A national study of burnout in a large sample of US physicians from all specialty disciplines as compared to a probability-based sample of the general US population. Compared with the general US population, US physicians were more likely to have symptoms of burnout and to be dissatisfied with work-life balance. Compared with high school graduates, individuals with an MD or DO degree were at increased risk for burnout, whereas individuals with a bachelor's degree, master's degree or professional/doctoral degree other than an MD or DO, were at lower risk of burnout.

Shanafelt T, Goh J, Sinsky C. The business case for investing in physician well-being. JAMA Intern Med. 2017;177: 1826-32.

Summary: This study was predicated on the idea that lack of awareness regarding the economic costs of physician burnout and uncertainty about what organizations can do to address the problem, have been barriers to many organizations taking action. Moral and ethical cases have been made for addressing burnout, but the financial risk and threat to an organization's long-term viability has been only minimally described. This paper provides a worksheet to project the organizational cost of physician burnout and outlines typical steps in an organization's journey towards expertise in physician well-being.

Shanafelt TD, Noseworthy JH. Executive Leadership and Physician Wellbeing: Nine Organizational Strategies to Promote Engagement and Reduce Burnout. Mayo Clin Proc 2017; 92(1): 129-146.

Summary: This paper summarizes 9 organizational strategies to promote physician engagement and describes how one institution has operationalized some of these approaches. The paper discusses the 7 drivers of burnout and engagement - workload and job demands; efficiency and resources; control and flexibility; organizational culture and values; social support and community at work; work-life integration; and meaning in work – and outlines how to optimize these drivers to promote physician engagement.

Sinsky CA, Dyrbye LN, West CP, Satele D, Tutty M, Shanafelt TD. Professional satisfaction and the career plans of US physicians. Mayo Clin Proc 2017; 92: 1625-35.

Summary: This study evaluated the relationship between burnout, satisfaction with EHR and work-life integration, and the career plans of US physicians. Physicians from all specialties in the US were surveyed, and the study reports that nearly 1 in 5 US physicians intend to reduce clinical work hours in the next year. Roughly 1 in 50 intend to leave medicine altogether in the next 2 years to pursue a different career. This may have significant implications on the projected shortage of US physicians.