"The Business Case for Investing in Physician Well-Being"

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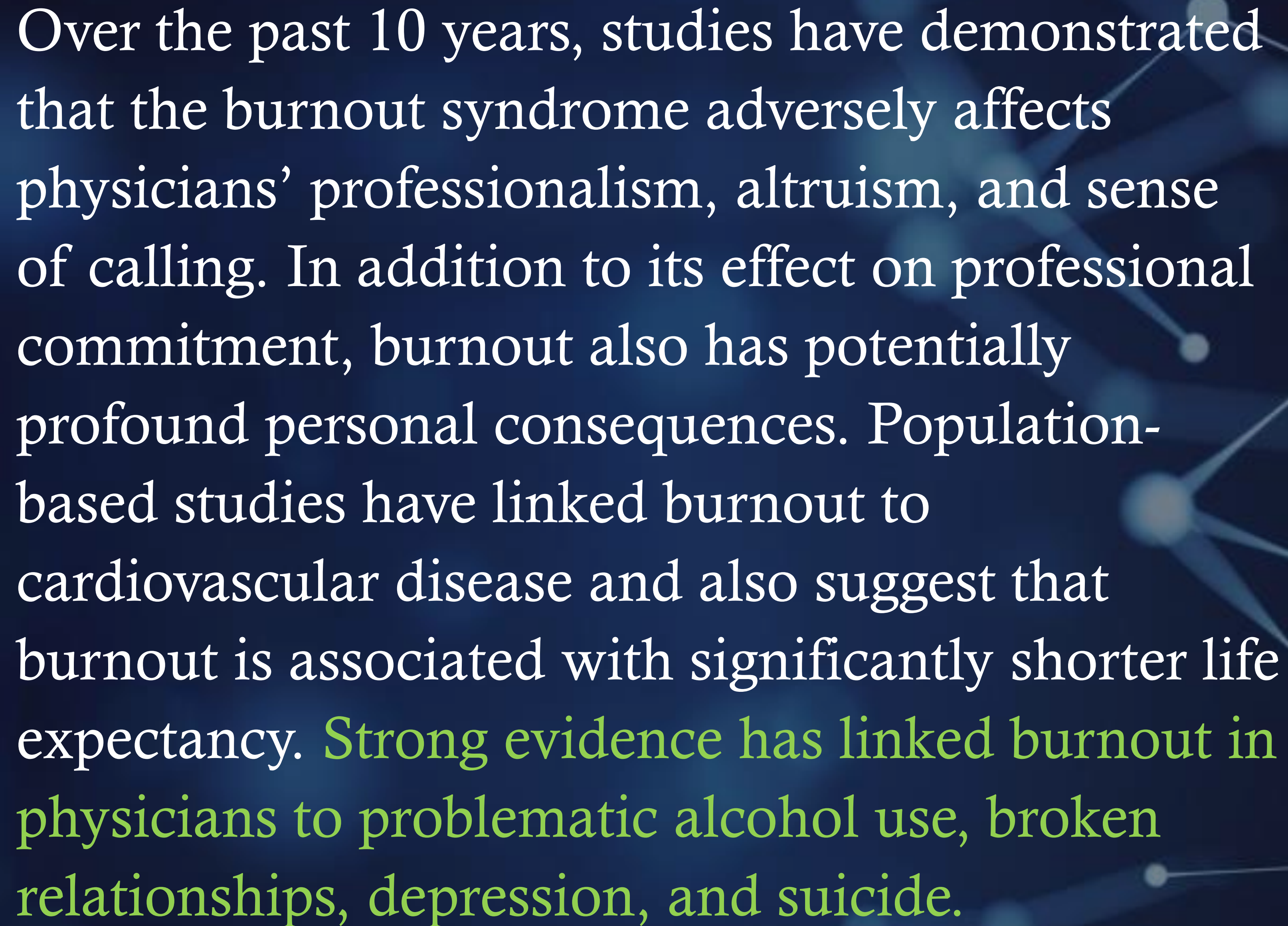


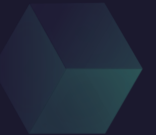
Over the past 10 years, studies have demonstrated that the burnout syndrome adversely affects physicians' professionalism, altruism, and sense of calling. In addition to its effect on professional commitment, burnout also has potentially profound personal consequences. Population-based studies have linked burnout to cardiovascular disease and also suggest that burnout is associated with significantly shorter life expectancy. Strong evidence has linked burnout in physicians to problematic alcohol use, broken relationships, depression, and suicide.

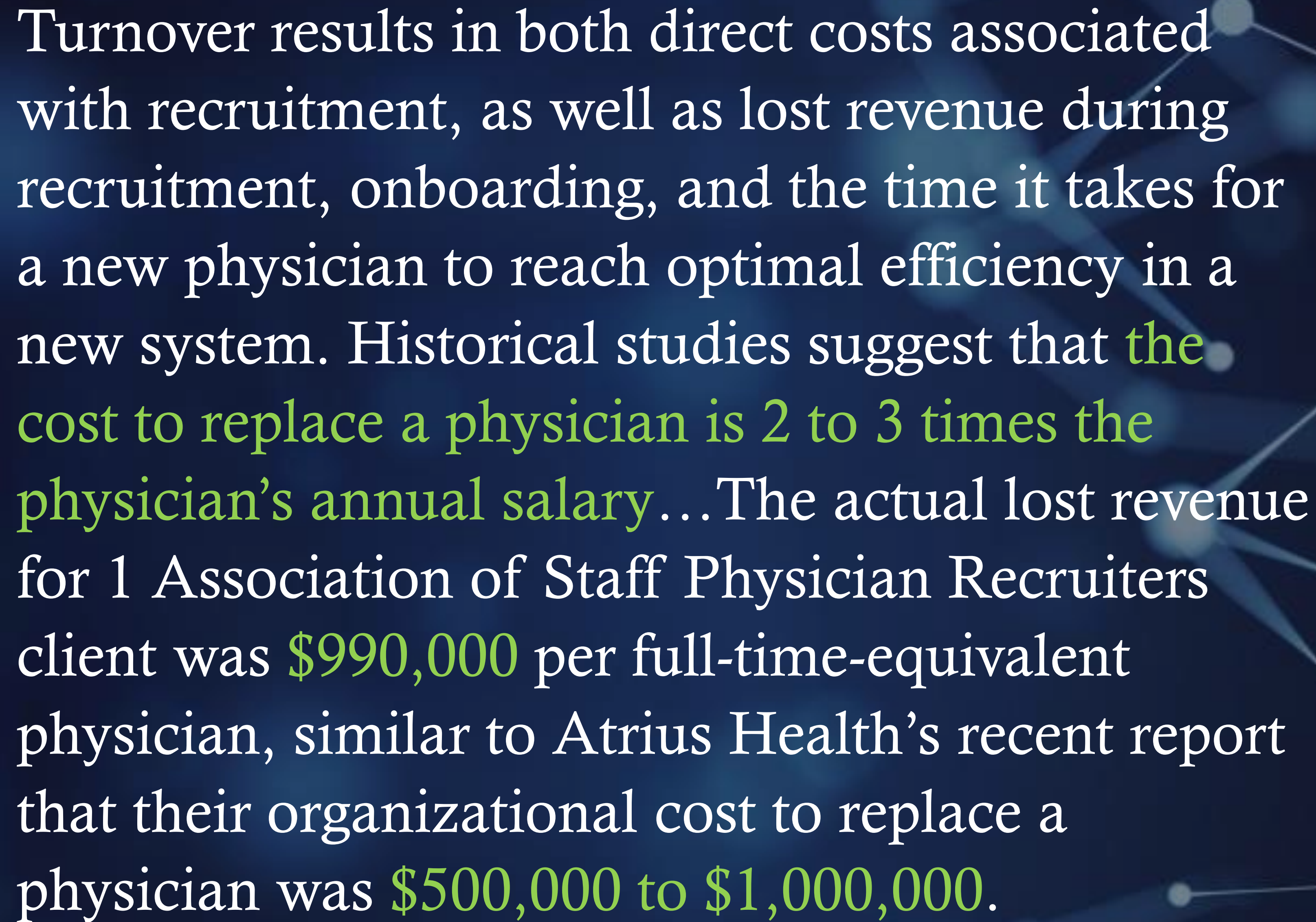
In 2008, large studies of US surgeons demonstrated that approximately 45% of surgeons had at least 1 symptom of burnout…Notably, physicians in specialties at the front line of access to care (eg, general internal medicine, family medicine, emergency medicine, neurology) appeared to be at highest risk.

In 2014, the first follow-up of the 2011 national study found that the rate of burnout among physicians had increased by 9% among US physicians while remaining stable among US workers in other fields over the same interval.

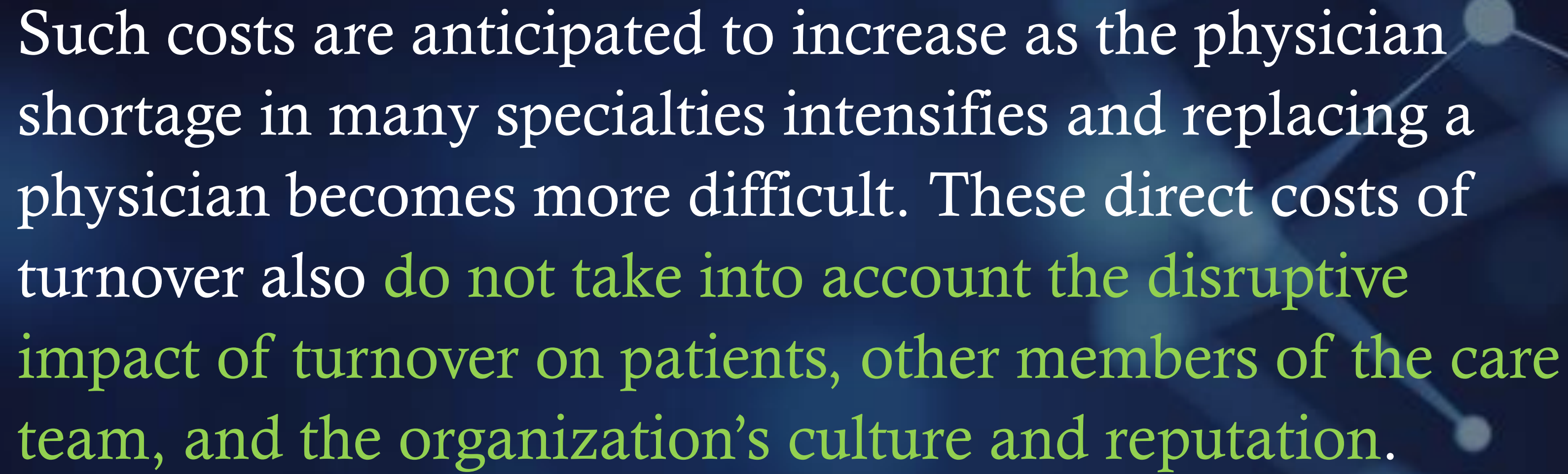
50% of US physicians are afflicted by an occupationally induced syndrome associated with profound personal and professional consequences.

Multiple large, national studies of US physicians have indicated that burnout is one of the largest factors determining whether or not physicians intend to leave their current position over the next 24 months…a recent prospective, longitudinal study of faculty physicians at Stanford University found that the actual 2-year rate of turnover among physician faculty who were burned out was double that of non-burned out faculty.



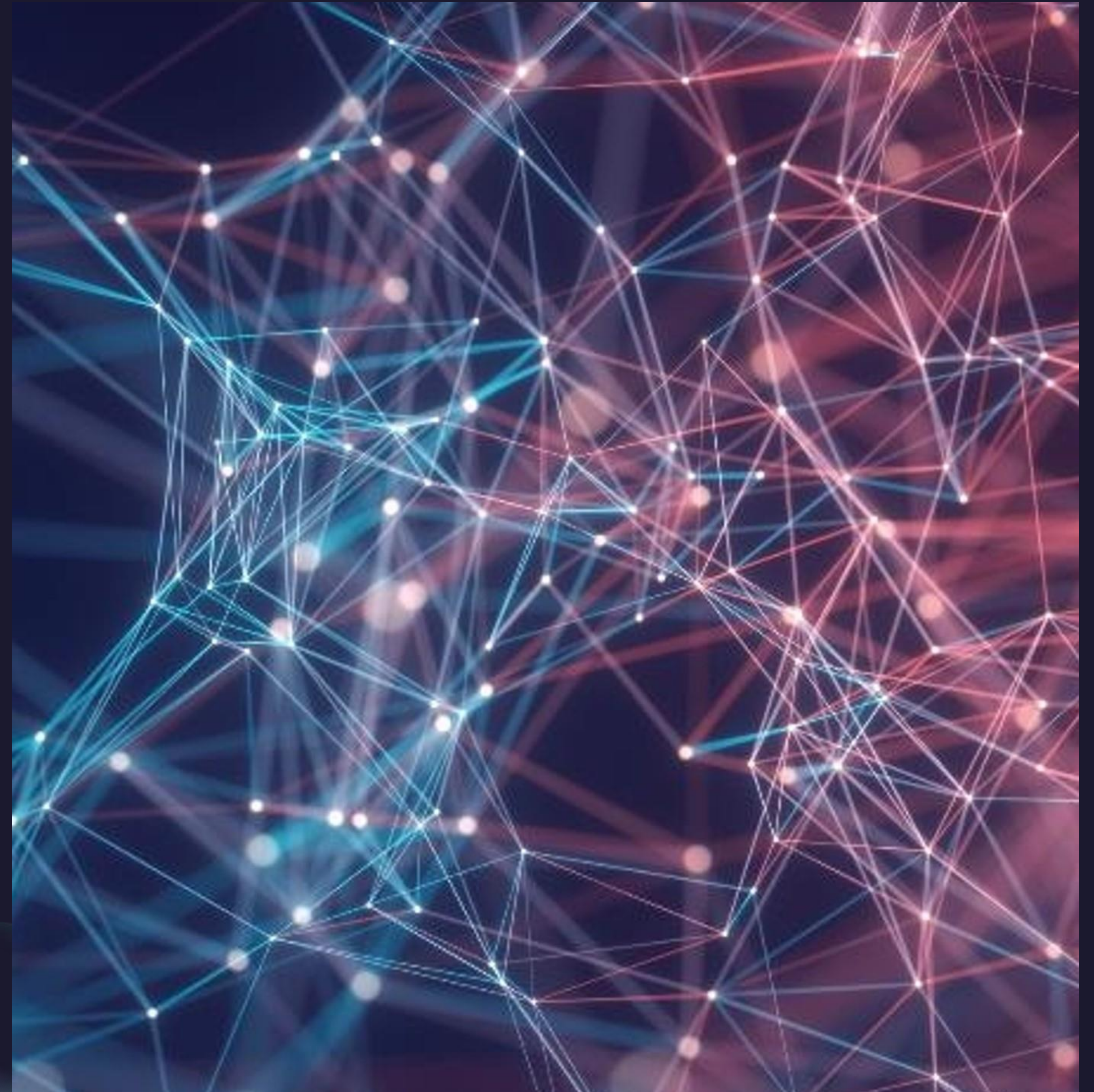


Turnover results in both direct costs associated with recruitment, as well as lost revenue during recruitment, onboarding, and the time it takes for a new physician to reach optimal efficiency in a new system. Historical studies suggest that the cost to replace a physician is 2 to 3 times the physician's annual salary…The actual lost revenue for 1 Association of Staff Physician Recruiters client was $990,000 per full-time-equivalent physician, similar to Atrius Health's recent report that their organizational cost to replace a physician was $500,000 to $1,000,000.



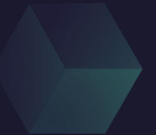
Such costs are anticipated to increase as the physician shortage in many specialties intensifies and replacing a physician becomes more difficult. These direct costs of turnover also do not take into account the disruptive impact of turnover on patients, other members of the care team, and the organization's culture and reputation. Indeed, prospective studies demonstrate that the turnover of any member of the care team increases the risk of burnout among all other members of the care team over the next 12 months even if someone is hired to replace that individual…A patient who is cared for by her physician of 10 years is likely to get better care at lower cost than a patient who is seen by a different physician every few years.

The largest cost associated with replacing a physician is the opportunity cost of lost patient care revenue…Due to the high fixed costs of many health care organizations, even a small change (eg, 1%-2%) in productivity can have large effects on an organization's bottom line…For academic medical centers, a decrease in the productivity of faculty in nonclinical tasks (eg, teaching, research, service to the organization on committees) can be even harder to quantify because it is difficult to accurately measure decreased engagement in teaching and mentorship or to identify the manuscripts and grants that a faculty member chose not to write. One estimate suggested that burnout reduces a faculty member's academic productivity (grants, publications) by approximately 15%.



Studies in both residents and practicing physicians suggest a dose-response relationship between burnout and medical errors…Studies of both residents and practicing physicians also show a relationship between burnout and other suboptimal patient care behaviors such as failing to fully disclose treatment options or answer a patient's questions.

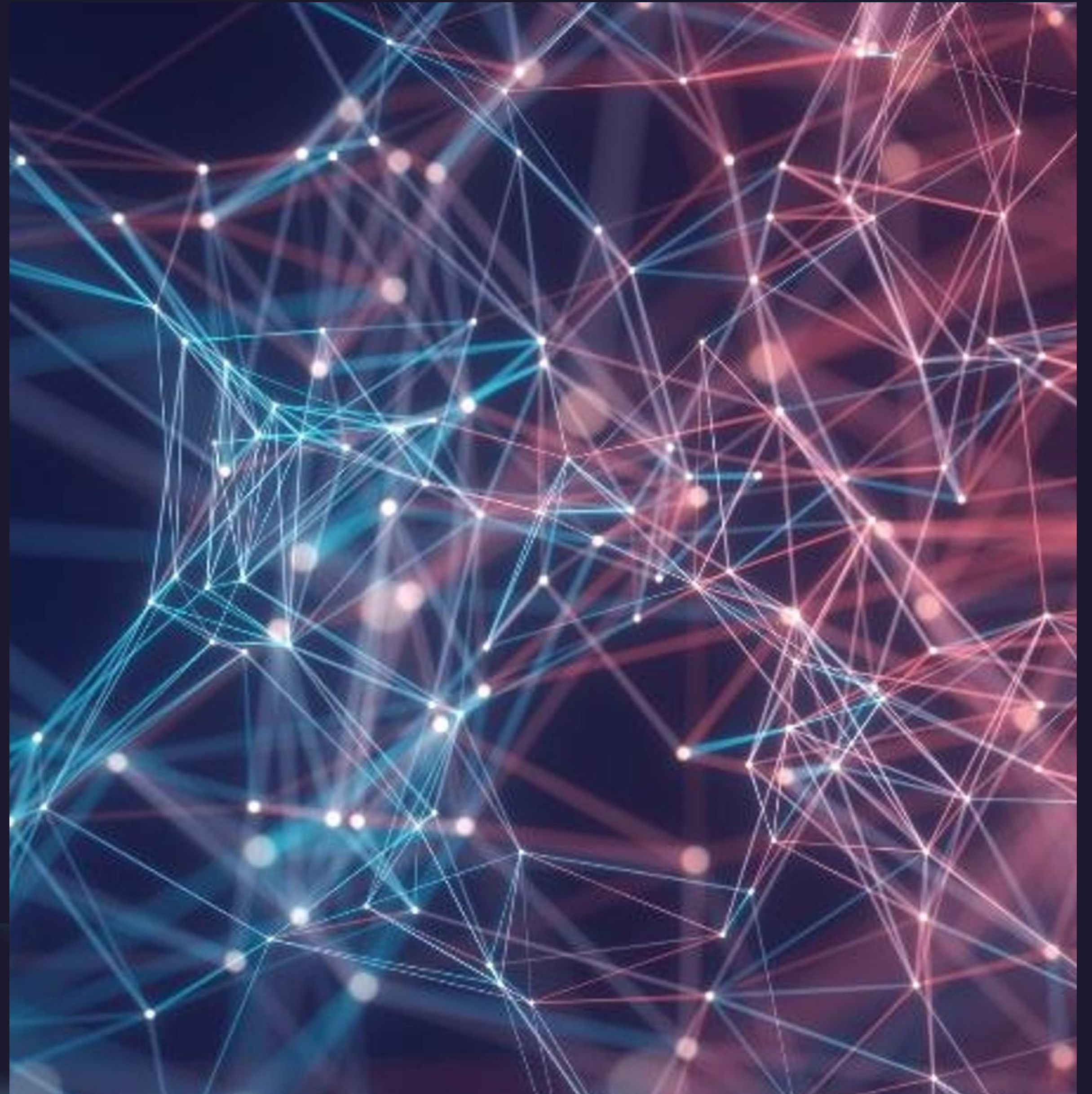
A study of 54 intensive care units in Switzerland found that the aggregate level of burnout among the physicians and nurses working on the unit was correlated with the standardized mortality ratios of the patients cared for on that unit. Longitudinal follow-up of these units demonstrated that burnout led to an erosion of teamwork over the next 9 months and resulted in decreased patient safety both directly as well as indirectly through its impact on team-based care. Studies in nurses have found a correlation between nurse burnout at the hospital level and independently reported hospital-acquired infections, further cementing the relationship between clinician well-being and objectively measured patient outcomes.



1 prospective longitudinal study among patients found that the post-discharge recovery time was longer for patients cared for by physicians who were more burned out. Other studies have found a relationship between physician job satisfaction and suboptimal prescribing habits, testing ordering, and patient adherence to their physicians' recommendations.

System-level interventions by organizations to enhance quality include prioritization by leadership, organizational learning, metrics, staffing considerations, structured interventions (eg, Plan-Do-Study-Act), open communication, and promoting culture change by intervening at the work unit, leader, and organization level.

Organizations can often make profound and effective changes in several of these dimensions (eg, flexibility and/or control, efficiency, community at work, and meaning in work) with limited investment. The fact that such changes can be low cost does not mean they are easy. They typically require a strategic plan customized to the local environment along with prioritization, commitment, and follow-through at the highest level of the organization.

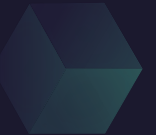


Consider a hypothetical organization that employed 450 physicians, had an annual turnover rate of 7.5%, and which had typical replacement costs of $500,000 per physician. The annual organizational cost of physician turnover would be approximately $16.9 million/y.

Although people leave organizations for many reasons…some of this turnover is directly related to burnout. Given prospective longitudinal studies demonstrating that burned out physicians are twice as likely to turn over and a burn out prevalence of 50%, the amount of turnover attributable to burnout for this organization would be approximately 2.5%/y. This number is derived from the fact that the overall rate of turnover (7.5%) is composed of the combination of 5% turnover among those without burnout and 10% turnover among those who are burned out.

Accordingly, without burnout, the turnover rate for the organization as a whole would decrease from 7.5% to 5%. If the organization believed that it had identified an organizational intervention that cost $1 million/y that could reduce the prevalence of burnout from 50% to 40% (a 20% relative risk reduction), the intervention would be expected to reduce turnover by 0.5% (a 20% reduction in the 2.5% turnover attributable to burnout). The associated organizational cost savings would be $1.125 million per year (ROI, 12.5%).

The estimated ROI is conservative because it does not account for lost revenue due to decreased productivity among burned out physicians who do not turnover or consider the other benefits of reduced burnout with respect to patient satisfaction, quality and safety, and potential reductions in litigation risk. Given the 'infectious' nature of burnout, as well as the increased risk of burnout for all members of the care team associated with turnover, the reduction in physician burnout would also likely have a salutary ripple effect, reducing the burnout of the other team members of the care team.



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