VIEWPOINT

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Funding Research on Health Workforce Well-being to Optimize the Work Environment

Health care is a \$4 trillion component of the US economy, and the well-being of the clinician workforce is a major factor determining its effectiveness. Extensive evidence indicates that inefficiency, poorly designed workflows and processes, suboptimal teamwork, work overload, isolation, problems with work-life integration, and a professional culture that expects perfection and discourages help-seeking are currently contributing to high levels of occupational distress among clinicians. Although the problem and its impact on the health care delivery system are well defined, there is minimal evidence regarding effective interventions to drive progress. This knowledge gap is, in large part, due to the near-complete absence of federal funding for research to address one of the critical challenges facing the US health care delivery system.

The challenges to health worker well-being existed long before the COVID-19 pandemic but have been exacerbated by the overwhelming workload and the exposure to death and physical, emotional, and moral distress that the pandemic has brought. Longitudinal studies suggest that most physicians and nurses are now experiencing occupational burnout,^{1,2} an occupational syndrome recognized by the World Health Organization,

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that has been associated with quality of care, cost, patient experience, and access to care. One systematic review and meta-analysis of 123 studies found that burnout was associated with poor-quality care in more than half of the studies analyzed.³ Burnout is also strongly related to turnover and reductions in clinical work hours,⁴ which exacerbates staffing shortages and leads to a vicious cycle that increases workload for the health care professionals remaining in the workforce.

While much is known about the characteristics of the work environment that contribute to clinician distress, less is known about how best to address these issues. Rigorous research is necessary to define an evidence-based approach to optimize the practice environment at the work unit, organization, and health system levels. The National Academy of Medicine released a consensus report in 2019 recommending a systems approach to address this issue. The foundation of the recommendations from the nation's experts centered on improving the work environment rather than increasing the resilience of individual workers.^{5,6} An effective system strategy will require design thinking, application of improvement science, and rigorous evaluation of interventions to determine efficacy, cost, and scalability. Health systems need to learn (and be funded to learn) about both what improves patient outcomes and what supports and sustains the well-being of the health workforce necessary to achieve those outcomes.

Currently, there is no federal funding or support for such evidence to be developed. Indeed, 1 of the 6 core recommendations in the National Academy of Medicine consensus report was for the US to allocate dedicated research funding to advance clinician professional well-being. The report specifically called on US Congress to allocate funding to federal agencies (such as the Agency for Healthcare Research and Quality, the National Institute for Occupational Safety and Health, the Health Resources and Services Administration, and the Department of Veterans Affairs) as well as to foster opportunities for public-private partnerships among stakeholders to support this research. Action on this recommendation was derailed by the pandemic even

as the pandemic profoundly increased clinician distress^{1,2} and the need to develop such evidence to address factors that contribute to occupational distress. Although Congress allocated a modest amount of funding (\$135 million) to help reduce barriers to accessing mental health care, promote mental health, and foster resilience among health care workers via the Dr Lorna Breen Health Care Provider Protection

Act,⁷ this support does not address the fundamental problems that are causing clinician distress in the first place, namely, the current health care work environment. Although a worthy pursuit, on its own this support is the functional equivalent of putting a first aid station in a factory where people are regularly being injured rather than addressing the factors that make the work unsafe.

Meaningful research funding is necessary to enable evaluation of larger-scale and more fundamental interventions rather than testing of piecemeal solutions. This would include evaluation of different staffing and team-based care models, redesign of workflows, elimination of low-value work, determination of how best to evolve and incorporate technology into clinical care, and efforts to optimize workload. Advancing these aims with design thinking as well as systems engineering and evaluating their impact through hybrid effectiveness-implementation trials, pragmatic clinical trials, and rapid-cycle randomized testing⁸ would accelerate identification of effective and scalable interventions. Allocation of meaningful funding to federal agencies specifically earmarked for research to address the factors in the work environment contributing to clinician distress would align this research with national priorities, foster rigorous experimental design, and promote evaluation of meaningful outcomes at scale and reasonable cost. Funding for development and evaluation of larger-scale interventions would attract scientists from other disciplines such as human factors engineering and organizational development into this field. Such an investment would also provide a career path for the researchers interested in this domain, which would expand both the depth and breadth of the US's expertise in this critical area.

Public funding for research that supports health workforce well-being should reflect the magnitude of the clinician burnout crisis and its impact on the health care delivery system. The US spends \$130 billion per year on disease-specific research through the National Institutes of Health (NIH) and private industry funding. These research investments support groundbreaking discoveries and transformation of the treatment for numerous health conditions. Currently, less than 1% of research spending supports investigation related to optimizing health care delivery and quality of care. Despite the National Academy of Medicine recommendation, almost no funding has been allocated to support research on clinician well-being. Although ultimately the investment in clinician well-being research should be commensurate with the magnitude of the problem, even a modest amount of sustained funding could likely have a major impact. For example, an incremental investment of \$50 million per year (less than one-tenth of 1% of the nation's investment in biomedical research) over the next decade to support research to foster system interventions promoting clinician well-being would support approximately 100 to 200 NIH RO1-sized research projects. In addition to individual RO1 projects, program project/center grants should be designed to foster networks of health systems to collaboratively test different solutions to common problems. Such collaborative research networks and coordinating centers will be necessary to establish generalizability and effectiveness at scale in pragmatic, cluster-randomized trials. Such an investment would likely result in development and testing of potentially high-impact interventions and create a foundation of evidence-based interventions to help organizations and the US health care delivery system cultivate a thriving health care workforce and likely simultaneously benefit quality of care and patient experience.

Although federal funding should be the foundation of research to improve the health care work environment, payers (such as private insurance companies) and health technology companies should also invest in this research both independently and through public-private partnerships. These organizations have an obligation to foster optimal patient outcomes (which are dependent on clinician well-being) and sustain the health care workforce that provides access for the patients they serve.

Now is the time for the US to get serious about addressing the high prevalence of occupational distress in the health care workforce. Health care accounts for roughly 20% of the US economy, and its effectiveness depends heavily on the physicians, nurses, pharmacists, and other health care professionals who deliver care. Rigorous research is critical to providing an evidence-based approach to addressing the system factors that are causing the problem. It is time for Congress to act on the recommendations of the National Academy of Medicine and allocate funds dedicated to research on clinician well-being.

ARTICLE INFORMATION

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Disclaimer: The opinions expressed herein are those of the authors and should not be interpreted as American Medical Association policy.

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