To Care Is Human — Collectively Confronting the Clinician-Burnout Crisis

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The ethical principles that guide L clinical care — a commitment to benefiting the patient, avoiding harm, respecting patient autonomy, and striving for justice in health care — affirm the moral foundation and deep meaning underlying many clinicians' view of their profession as a worthy and gratifying calling. It is clear, however, that owing to the growing demands, burdensome tasks, and increasing stress experienced by many clinicians, alarmingly high rates of burnout, depression, and suicide threaten their wellbeing. More than half of U.S. physicians report significant symptoms of burnout - a rate more than twice that among professionals in other fields. Moreover, we know that the problem starts early. Medical students and residents have higher rates of burnout and depression than their peers who are pursuing nonmedical careers. Nor is the trend limited to physicians: nurses also experience alarming rates of burnout.1 Clinicians are human, and it takes a personal toll on them when circumstances make it difficult to fulfill their ethical commitments and deliver the best possible care.

Burnout — a syndrome characterized by emotional exhaustion and depersonalization (which includes negativity, cynicism, and the inability to express empathy or grief), a feeling of reduced personal accomplishment, loss of work fulfillment, and reduced effectiveness — has serious conse-

quences in terms of both human cost and system inefficiency.¹ Nothing puts these consequences into starker relief than the devastating rates of suicide among physicians. As many as 400 U.S. physicians die by suicide every year.² Nearly every clinician has been touched at some point by such a tragedy.

Not only are clinicians' lives at risk, so is patient safety. Some studies have revealed links between clinician burnout and increased rates of medical errors, malpractice suits, and health care-associated infections. In addition, clinician burnout places a substantial strain on the health care system, leading to losses in productivity and increased costs. Burnout is independently associated with job dissatisfaction and high turnover rates. In one longitudinal study, the investigators calculated that annual productivity loss in the United States that is attributable to burnout may be equivalent to eliminating the graduating classes of seven medical schools.1 These consequences are unacceptable by any standard. Therefore, we have an urgent, shared professional responsibility to respond and to develop solutions.

Indeed, there is broad recognition in the health care community that the problem of clinician burnout, depression and other mental disorders, and suicide has reached a crisis level. There are many existing efforts by individual organizations, hospitals, train-

ing programs, professional societies, and specialties to confront the crisis. But no single organization can address all the issues that will need to be explored and resolved. There is no mechanism for systematically and collectively gathering data on, analyzing, and mitigating the causes of burnout. The problem is not lack of concern, disagreement about the severity or urgency of the crisis, or absence of will to act. Rather, there is a need to coordinate and synthesize the many ongoing efforts within the health care community and to generate momentum and collective action to accelerate progress. Furthermore, any solution will need to involve key influencers beyond the health care community, such as information technology (IT) vendors, payers, regulators, accreditation agencies, policymakers, and patients.

We believe that the National Academy of Medicine (NAM; formerly the Institute of Medicine, or IOM) is uniquely suited to take on the coordinating role. Nearly 20 years ago, the IOM report To Err Is Human identified high rates of medical error driven by a fragmented care system. The report spurred systemwide changes that have improved the safety and quality of care.3 Today, we need a similar call to action. To that end, in January 2017, the NAM, in collaboration with the Association of American Medical Colleges (AAMC) and the Accreditation Council for Graduate Medical Education (ACGME), launched

a national Action Collaborative on Clinician Well-Being and Resilience.⁴ The collaborative aims to draw on the relevant evidence base to build on existing efforts by facilitating knowledge sharing and catalyzing collective action.

Since launching the collaborative, the NAM has been overwhelmed by requests from organizations wanting to take part in this work and has therefore issued an open call for network organizations to share information and resources. These network organizations have made formal public commitments to promoting clinician well-being (available on the collaborative's website5), and they pledge to work with the NAM and others in the network to share knowledge and coordinate efforts. Currently, the collaborative comprises 55 core organizations and a network of more than 80 others, including clinician groups that span many disciplines and specialties, as well as payers, researchers, government agencies, technology companies, patient organizations, trainees, and more.

Four central goals guide the collaborative's initial work: to increase the visibility of clinician stress and burnout, to improve health care organizations' baseline understanding of the challenges to clinician well-being, to identify evidence-based solutions, and to monitor the effectiveness of implementation of these solutions. We already know that burnout is driven largely by external factors, rather than by personal characteristics. These factors include work-process inefficiencies (such as cumbersome IT systems), excessive work hours and workloads, work-home conflicts, problems with the organizational culture (such as team dysfunction

and management styles that neglect clinician input), and perceived loss of control and meaning at work. Although personal factors unrelated to the clinical environment (such as being young, female, or a parent of young children or teenagers) may also contribute to a greater risk of burnout, the collaborative will focus initially on promoting solutions and progress at organizational, systems, and cultural levels.

The collaborative has organized its efforts into four work streams. The "Research, Data, and Metrics" workgroup is compiling validated that will serve as a user-friendly repository for available data, models, and toolkits and will provide opportunities for clinicians and other stakeholders to share information and build productive relationships. The NAM encourages all interested organizations and individuals to become involved in the work of the collaborative and to use its products in their own endeavors (for more information, see the project website⁴).

The health professions are at a critical inflection point. The health system cannot sustain current

The goals are to increase the visibility of clinician burnout, improve organizations' understanding of challenges to clinician well-being, identify evidence-based solutions, and monitor their effectiveness.

survey instruments and evidencebased interventions and identifying benchmarks for gauging progress in supporting clinician well-being. The "Conceptual Model" workgroup has created a comprehensive conceptual model and will establish a shared taxonomy by defining key factors. The "External Factors and Work Flow" workgroup is exploring approaches to optimal team-based care and documentation in the rapidly evolving digital health environment. And the "Messaging and Communications" workgroup is identifying key stakeholders and developing targeted messaging to disseminate available evidence and knowledge and thus inspire action. A key deliverable for the collaborative is an online "knowledge hub" (to launch in 2018) rates of clinician burnout and continue to deliver safe, highquality care. But there is reason to be optimistic that the tide is turning. The strong commitment of more than 100 national organizations to the work of the collaborative has made clear that clinician well-being is a growing priority for health care leaders, policymakers, payers, and other decision makers capable of bringing about system-level change. Through collective action and targeted investment, we can not only reduce burnout and promote well-being, but also help clinicians carry out the sacred mission that drew them to the healing professions - providing the very best care to patients.

Disclosure forms provided by the authors are available at NEJM.org.

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1. Dyrbye LN, Shanafelt TD, Sinsky CA, et al. Burnout among health care professionals:

- a call to explore and address this underrecognized threat to safe, high-quality care. Washington, DC: National Academy of Medicine, July 5, 2017 (https://nam.edu/Burnout-Among-Health-Care-Professionals).
- 2. Andrew LB. Physician suicide. Medscape. June 12, 2017 (https://emedicine.medscape.com/article/806779-overview).
- **3.** Institute of Medicine. To err is human: building a safer health system. Washington, DC: National Academies Press, 1999.
- 4. National Academy of Medicine. Action

Collaborative on Clinician Well-Being and Resilience. 2017 (https://nam.edu/initiatives/clinician-resilience-and-well-being).

5. National Academy of Medicine. Action Collaborative on Clinician Well-Being and Resilience: organizational commitment statements. 2017 (https://nam.edu/initiatives/clinician-resilience-and-well-being/commitment-statements-clinician-well-being/).

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HISTORY OF MEDICINE

PEPFAR — 15 Years and Counting the Lives Saved

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In the long history of successful public health initiatives, such as those leading to the eradication of smallpox, the elimination of polio throughout most of the world, and the marked reduction globally in vaccine-preventable childhood diseases, few programs have matched the impact of one that began in 2003, the President's Emergency Plan for AIDS Relief, or PEPFAR. This innovative program has had an unprecedented impact on the pandemic of HIV and AIDS.

The major scientific and clinical advances that made PEPFAR possible were the development and approval of highly effective combinations of antiretroviral medications that suppressed the replication of HIV. These drugs, generally administered in combinations of three or more, have transformed the lives of people living with HIV/AIDS, providing them with the possibility of a near-normal life expectancy and, in most cases, the ability to return to normal daily activities. Although HIV-infected people in resource-rich countries almost immediately benefited from these medications when they were licensed in the mid-1990s, a dramatic discrepancy in access to these drugs soon became apparent. More than 90% of all HIV infections were occurring in resource-limited countries, particularly in sub-Saharan Africa, where patients had little or no access to antiretroviral medications. Millions of people who could have been saved were needlessly dying.

PEPFAR was created by President George W. Bush, who felt strongly that as a resource-rich and privileged country, the United States was morally obligated to help people in low-income countries with diseases for which there were effective interventions that were unavailable to them. HIV/AIDS in the resource-limited world, particularly in southern and eastern Africa, was a stark example of such a disease. Early in his administration, Bush articulated his belief that the United States could and should design and implement a transformational and accountable program to address the HIV/AIDS pandemic in low-income countries. At that time, an estimated 30 million people were living with HIV/AIDS in Africa, where more than one third of adults in some countries were infected.¹

After consulting scientific advisors, faith-based organizations, and others from both inside and outside his administration, Bush tasked trusted officials, including one of us (A.S.F.) and an inner circle of White House staff, with determining the feasibility of developing a program for the prevention, treatment, and care of people living with or at risk for HIV/AIDS in Africa and other lowincome regions. The proposed goal would be to supply lifesaving drugs to HIV-infected people and provide the means of preventing new infections, such as the distribution of condoms to at-risk individuals.

In 2002, Bush sent members of his administration and federal officials, including one of us (A.S.F.), on a fact-finding mission to several of the hardest-hit African countries to determine whether such a program was feasible. In those countries, philanthropic and other organizations were efficiently and effectively providing antiretroviral drugs to small numbers of patients, and it was clear that patients there understood and em-