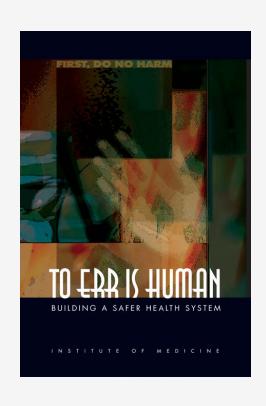
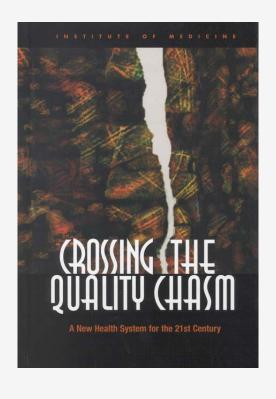


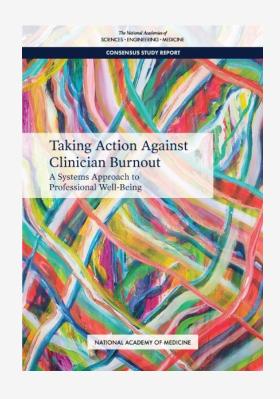


The National Academies of SCIENCES ENGINEERING MEDICINE

Health System Improvement











Study Sponsors

- Accreditation Council for Graduate Medical Education
- American College of Occupational and Environmental Medicine
- American Hospital Association
- Arnold P. Gold Foundation
- Association of American Medical Colleges
- BJC HealthCare
- Cedars-Sinai Medical Center
- The Doctors Company Foundation
- Duke University Hospital
- Gordon and Betty Moore Foundation

- Johns Hopkins Health System
- Josiah Macy Jr. Foundation
- Keck School of Medicine of USC
- Medical College of Wisconsin
- Montefiore Medicine
- The Mont Fund
- The Ohio State University
- The State University of New York System
- Tulane University
- University of Florida
- University of Illinois Hospital and Health Sciences System
- University of Massachusetts Medical School

- University of Michigan
- University of New Mexico Health Sciences Center
- University of Utah Health
- University of Virginia Medical Center and
- University of Virginia School of Medicine
- Vanderbilt University Medical Center
- Washington University School of Medicine
- Yale School of Medicine
- Yale New Haven Health System



The National Academies of SCIENCES ENGINEERING MEDICINE

Committee Members

Pascale Carayon, PhD (Co-chair)
University of Wisconsin – Madison

Christine Cassel, MD (Co-chair) University of California, San Francisco

Elisabeth Belmont, JD MaineHealth

Neil Busis, MD UPMC Shadyside

M. Lynn Crismon, PharmD
The University of Texas at Austin College of Pharmacy

Liselotte Dyrbye, **MD, MHPE** Mayo Clinic

Pooja Kinkhabwala, DO Larkin Community Hospital

Wanda Lipscomb, PhD Michigan State University

Saranya Loehrer, MD, MPH Institute for Healthcare Improvement

Lex MacNeil, DDS Midwestern University, Downers Grove

José Pagán, PhD New York University

Sharon Pappas, PhD, RN Emory Healthcare Cynda Rushton, PhD, RN
Johns Hopkins University

Tait Shanafelt, MD Stanford Medicine

George Thibault, MD
Josiah Macy Jr. Foundation (retired)

Vindell Washington, MD
Blue Cross Blue Shield of Louisiana

Matthew Weinger, MD Vanderbilt University

NASEM Staff

Laura Aiuppa Study Director

Marc Meisnere Rajbir Kaur Heather Kreidler Sharyl Nass Toby Warden



Study Charge

- Examine the evidence regarding the causes of clinician burnout and the consequences for clinicians and patients
- Examine components of clinical training and the work
 environment that can contribute to clinician burnout
- Identify systems interventions, tools and approaches to support clinician well-being
- Propose a research agenda to improve the knowledge base



Committee Process

- 4 in-person meetings and several conference calls between Oct 2018 and Aug 2019
 - Included 2 public information-gathering sessions to get input from a broad range of invited experts
- Literature review (~4,000 articles) and synthesis of findings and conclusions
- Recommendations driven by consensus
- External peer-review by 14 experts in the various disciplines related to the study



What is Clinician Burnout?

- The World Health Organization defines burnout as a problem associated chronic workplace stress; it is not an individual mental health diagnosis, nor the same as depression
- Burnout: emotional exhaustion, depersonalization, and low sense of professional efficacy
- A chronic imbalance of high job demands and inadequate job resources can lead to burnout

Sources: Maslach, C., W. B. Schaufeli, and M. P. Leiter. 2001. *Job Burnout*. Annu Rev Psychol. 52: 397-422; World Health Organization. 2019. QD85: Burn-out. http://id.who.int/icd/entity/129180281.



The National | SCIENCES | ENGINEERING | MEDICINE

Burnout is a Major Problem

- Between 35% and 54% of nurses and physicians and between 45% to 60% of medical students and residents - experience burnout symptoms
- Many consequences for clinicians and patients (quality and safety), for health care organizations (e.g., turnover), and for society (workforce shortages)
- Burnout is a barrier to the Triple Aim: better care, improved population health, and lower health care cost



Systems Approaches are Needed

- Clinician burnout is a complex multi-factorial problem; there's no one solution
- Many health care system aspects have to work together to mitigate burnout and improve professional well-being
- Stress and burnout among clinicians in practice and in training have to be addressed



Taking Action Against Burnout: A Bold Vision

- Requires redesigning clinical systems focused on activities that 1)
 patients find important to their care, and 2) enable clinicians to provide
 high-quality care
- Interventions should target known system factors that impact clinician burnout and professional well-being at the systems-level.
- System interventions require commitment, infrastructure, resources, accountability, and a culture that supports clinician wellbeing



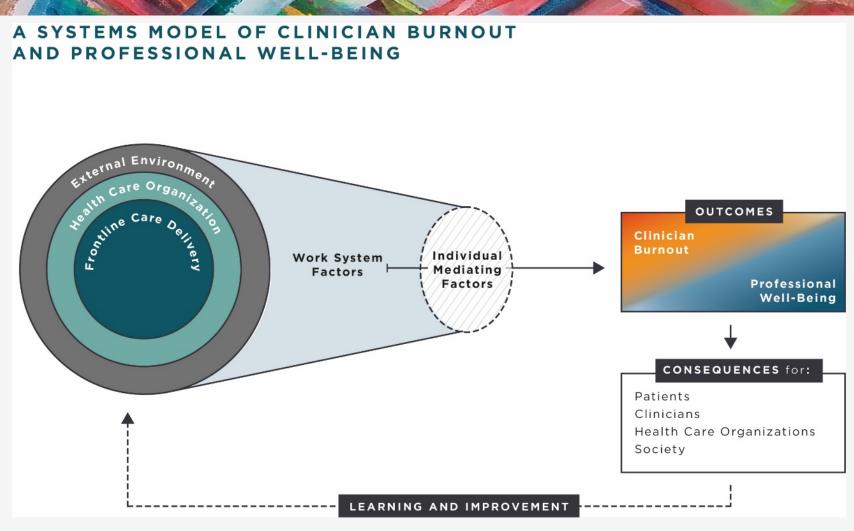
Committee's Conceptual Model

Scarce evidence exists on effective system-level burnout interventions

BUT...

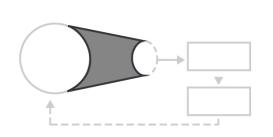
Substantial evidence showing strategies to improve work and learning environments prevent and mitigate burnout and promote professional well-being.







The National Academies of SCIENCES ENGINEERING MEDICINE



WORK SYSTEM FACTORS OF THE SYSTEMS MODEL OF CLINICIAN BURNOUT AND PROFESSIONAL WELL-BEING

Work System Factors include:

Job Demands

- Excessive workload, unmanageable work schedules, and inadequate staffing
- Administrative burden
- Workflow, interruptions, and distractions
- Inadequate technology usability
- Time pressure and encroachment on personal time
- Moral distress
- Patient factors

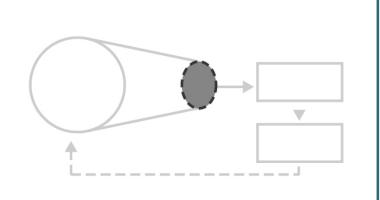
Job Resources

- Meaning and purpose in work
- Organizational culture
- Alignment of values and expectations
- Job control, flexibility, and autonomy
- Rewards
- Professional relationships and social support
- Work-life integration



The National Academies of

SCIENCES ENGINEERING MEDICINE



INDIVIDUAL MEDIATING FACTORS
OF THE SYSTEMS MODEL OF
CLINICIAN BURNOUT AND
PROFESSIONAL WELL-BEING

Individual Mediating Factors include:

- Personality and temperament
- Coping strategies
- Resilience
- Personal relationships and social support



Guidelines for Designing Well-Being Systems



Values, Systems Approach, and Leadership

- Align organizational structures and processes with organizational and workforce values
- Use a systems approach to proactively improve professional well-being while supporting patient care
- Engage and commit leadership at all organizational levels to address clinician burnout and improve professional well-being



Work System Redesign

- Enhance the meaning and purpose of work and deliver value to patients
- Provide adequate resources (e.g., staffing, scheduling, workload, opportunities to learn, greater job control, usable technologies, adequate physical environment) to support clinicians' work
- Design work systems that facilitate teamwork, collaboration, communication, and professionalism



Implementation

- **Build infrastructure** for a well-being system that has adequate organizational resources, processes, and structures; continually learns and improves; and is accountable.
- **Design reward systems** that align with organizational and professional values to support professional well-being.
- Nurture organizational culture that supports change management, psychological safety, vulnerability, and peer support.
- Use human-centered design processes to co-design, implement and continually improve solutions and interventions that address clinician burnout.



Collective and coordinated action across all levels of the health care system – front line care delivery, the health care organization, and the external environment is needed.



6 Goals to Reduce Burnout and Foster Professional Well-Being

Goal 1 Create Positive Work Environments

Goal 2 Create Positive Learning Environments

Goal 3 Reduce Administrative Burden

Goal 4 Enable Technology Solutions

Goal 5 Provide Support to Clinicians & Learners

Goal 6 Invest in Research

The National

Academies of



RECOMMENDATIONS

Goal 1 Create Positive Work Environments



Create Positive Work Environments

Health care organizations should

- develop, pilot, implement, and evaluate organization-wide initiatives to reduce the risk of burnout, foster professional well-being, and enhance patient care (Recommendation 1a)
- adopt and apply principles that improve the work environment and balance job demands and job resources (Recommendation 1b)
- routinely measure clinician burnout and ameliorate the work system factors that erode professional well-being (Recommendation 1c)



RECOMMENDATIONS

Goal 2 Create Positive Learning Environments



Create Positive Learning Environments

Health professions educational institutions and clinical training sites should

- develop, pilot, implement, and evaluate initiatives to improve the learning environment and support learner professional wellbeing (Recommendation 2a)
- routinely assess the learning environment and factors that erode professional well-being and contribute to learner burnout (Recommendation 2b)



Create Positive Learning Environments

Accreditors, regulators, national educational organizations, health professions educational institutions, and other related external entities should

 partner to support the professional well-being and the development of learners (Recommendation 2c)



RECOMMENDATIONS

Goal 3 Reduce Administrative Burden



Reduce Administrative Burden

Health-care-policy, regulatory, and standards-setting entities at the federal and state levels should

- systematically assess laws, regulations, policies, and standards to determine the effects on clinician job demands and resources and on patient care quality, safety, and cost (Recommendation 3a)
- in conjunction with health care organizations adopt technology-enabled approaches to documentation and reporting that incorporate human-centered design and human factors and systems engineering approaches (Recommendation 3b)



RECOMMENDATIONS

Goal 4 Enable Technology Solutions



Enable Technology Solutions

Health care leaders and IT vendors should

 engage clinicians in the design and deployment of health IT using human-centered design and human factors and systems engineering approaches to ensure the effectiveness, efficiency, usability, and safety of the technology (Recommendation 4a)



Enable Technology Solutions

Federal and state policy makers should

- facilitate the optimal flow of useful information among all members of the health care community through regulation and rule making (Recommendation 4b)
- in collaboration with health IT companies and innovators and others, develop the infrastructure and processes for a truly **patient-centered and clinically useful health information system** (Recommendation 4c)



RECOMMENDATIONS

Goal 5 **Provide Support to Clinicians and Learners**





Provide Support to Clinicians & Learners

State licensing boards, health system credentialing bodies, disability insurance carriers, and malpractice insurance carriers should

 minimize collection of clinicians' personal health information (by either not asking or inquiring only about current impairments due to any health condition) (Recommendation 5a)



Provide Support to Clinicians & Learners

State legislative bodies should

 create legal protections that allow clinicians to seek and receive help and support for mental health problems without the information being admissible in malpractice litigation (Recommendation 5b)



Provide Support to Clinicians & Learners

Health professions educational institutions, health care organizations, and training sites should

 identify and address aspects of the learning environment, institutional culture, infrastructure and resources, and policies that prevent or discourage access to professional and personal support programs for individual learners and clinicians (Recommendation 5c)



RECOMMENDATIONS

Goal 6 Invest in Research



Invest in Research

Federal agencies, including AHRQ, NIOSH, HRSA, and the VA, should

- develop a coordinated research agenda by the end of 2020 to identify the best measures of occupational stress, burnout, and workplace well-being in the health care environment; to determine the system factors that contribute to stress for clinicians and learners in all settings; and to test system-level interventions (Recommendation 6a)
- create opportunities for public-private partnerships to support research on clinician and learner professional well-being and burnout (Recommendation 6b)



Connections Heal Patients and Clinicians



"Woven represents the intricacies, layers, and complexities of feeling burnt out while serving patients. It doesn't happen all at once, but builds over time. The shimmering threads represent life and hope that is embedded in each provider; the spirit of serving; and the belief that you will make a difference. All of these aspects woven together are the essence of the provider."

Excerpted from the National Academy of Medicine's *Expressions of Clinician Well-Being: An Art Exhibition*. To see the complete work by Tia Calvert, visit https://nam.edu/expressclinicianwellbeing/#/artwork/58.



Download the report & view more resources: http://nam.edu/clinicianwellbeingstudy

Questions? Send email to: supportingclinicianwellbeing@nas.edu

