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Understanding and Preventing Burnout: Improving Health Care Outcomes

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Learning Objectives

- Explain how depression, anxiety and burnout syndrome in health care professionals (HCPs) influence the care provided to patients.

- Discuss the impact of HCP burnout on health, patient care, outcomes and the health care system, as well as the impact on personal lives including relationships and parenting.

- Explore the contributing factors and the science behind HCP burnout.

- Describe the risk factors associated with provider burnout including work factors, personal characteristics and organizational factors as well as the profound impact of sleep and exercise on restoration of cognitive capability.

- Explore interventions, such as mindfulness and cognitive-behavioral therapy (CBT) mobile apps, designed to support the mental health needs of HCPs and improve team performance by decreasing overall stress.

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What is Burnout?

Burnout is a syndrome of depersonalization, emotional exhaustion, and low personal accomplishment leading to decreased effectiveness at work.

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Emotional Exhaustion
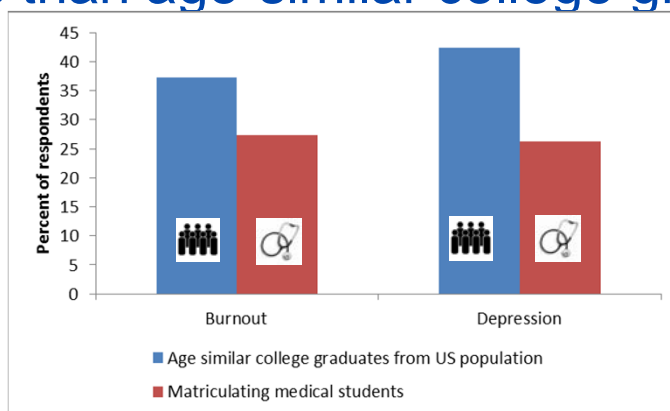
"I feel like I'm at the end of my rope."

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Depersonalization

"I've become more callous toward people since I took this job."

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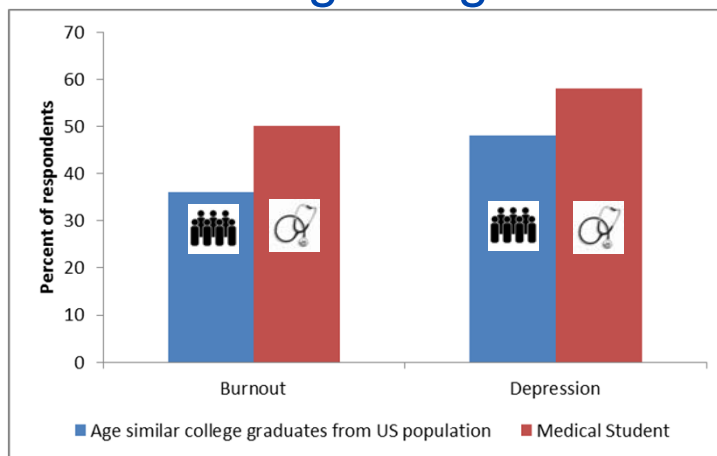# Matriculating medical students have lower distress than age-similar college graduates

2012, 7 U.S. medical schools & population sample (slide from Dyrbye)

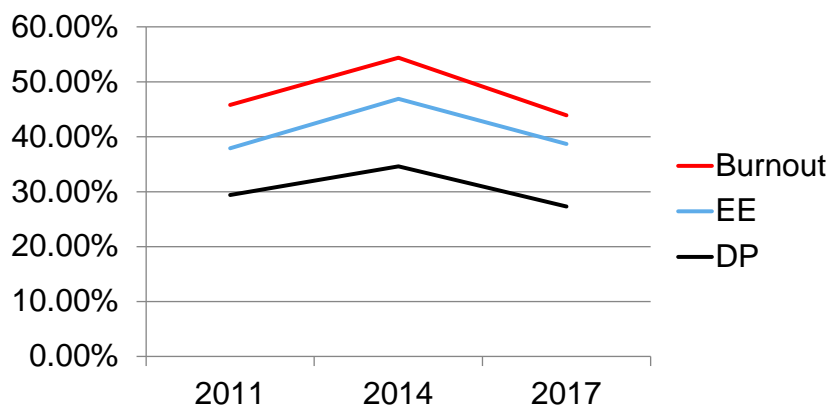Brazeau et al. Acad Med. 2014;89:1520-5

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What happens to distress relative to population after beginning medical school?

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Burnout among Practicing Physicians

National Data (Shanafelt et al., Arch Intern Med 2012; Mayo Clin Proc 2015, 2019)

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Burnout among Practicing Physicians

	2011	2014	2017
Dissatisfied with WLB:	36.9%	44.5%	40.7%
+ depression screen:	38.2%	39.8%	41.7%

National Data (Shanafelt et al., Arch Intern Med 2012; Mayo Clin Proc 2015, 2019)

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But Don't Burnout and Distress Affect Everyone?

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2017 AMA Survey
Employed Physicians vs. Employed U.S. Population

	Physicians n=3971	Population n=5198	p
Male	57%	52%	<0.001
Age (median)	50	52	<0.001
Hrs/Wk (median)	50	40	<0.001
Burnout*	40%	28%	<0.001
Dissatisfied WLI	43%	21%	<0.001

* As assessed using the single-item measures for emotional exhaustion and depersonalization adapted from the full MBI. Area under the ROC curve for the EE and DP single items relative to that of their respective full MBI domain score in previous studies were 0.94 and 0.93

Shanafelt *et al.*, Mayo Clin Proc 2019

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Consequences of Physician Burnout

- Medical errors[1-3]
- Impaired professionalism[4-6]
- Reduced patient satisfaction[7]
- Racial bias[8]

- Blunted growth in medical knowledge[10]
- Depression and suicidal ideation[11,12]
- Motor vehicle crashes and near-misses[13]

- Staff turnover, reduced hours[9,14]
- Total costs: >$4.6B dollars/year[15,16]

[1]JAMA 296:1071, [2]JAMA 304:1173, [3]JAMA 302:1294, [4]Annals IM 136:358, [5]Annals Surg 251:995, [6]JAMA 306:952, [7]Health Psych 12:93, [8]JAMA Netw Open 2019, [9]JACS 212:421, [10]JAMA 306:952, [11]Annals IM 149:334, [12]Arch Surg 146:54, [13]Mayo Clin Proc 2012, [14]Mayo Clin Proc 2016, [15]JAMA IM 2017, [16]Annals IM 2019

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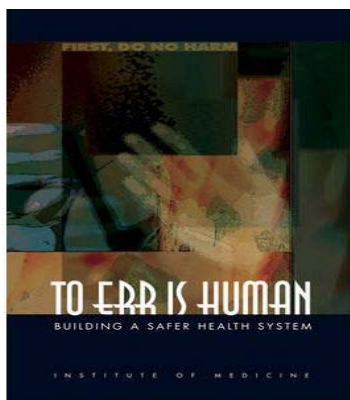## A Public Health Crisis!

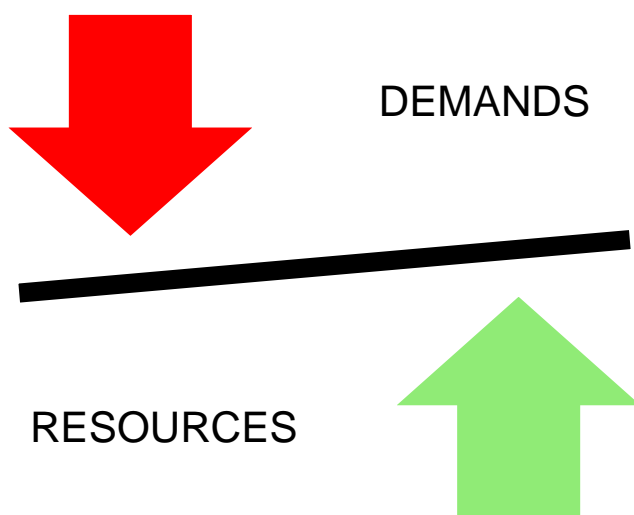| Burnout in U.S. alone:	
>40,000	Medical Students
>60,000	Residents and Fellows
>490,000	Physicians
Plus other health care and biomedical science professionals	

Individual or system problem?

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"Every system is perfectly designed to get the results it gets"

- Dr. Paul Batalden

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DEMANDS

RESOURCES

A chronic imbalance of high job demands and inadequate job resources can lead to burnout

nam.edu/ClinicianWellBeingStudy

Mayo Clinic | Proprietary and confidential. Do not distribute.

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Performance

- To optimize performance, we need to shift our place on this curve.

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Shanafelt TD, Noseworthy JH. Mayo Clin Proc. 2017;92:129-46.

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Documentation regulations:
Length of US notes vs other countries
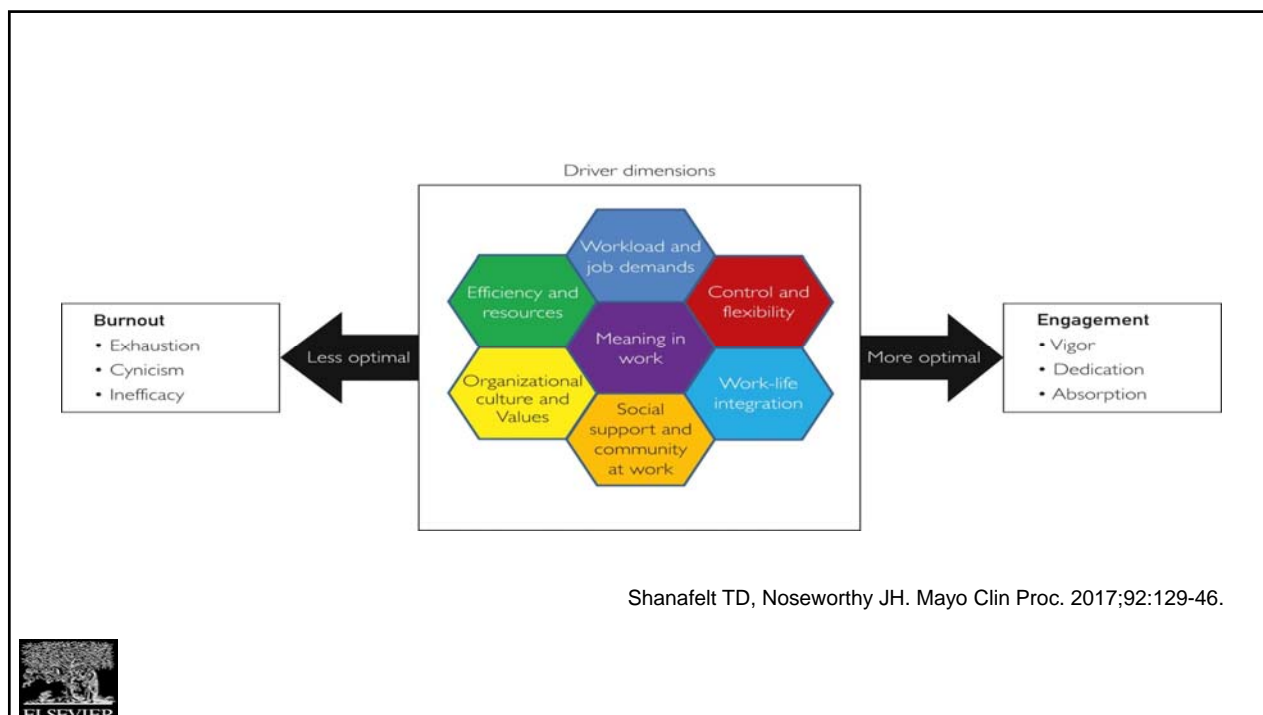
Downing *Ann Int Med* 2018
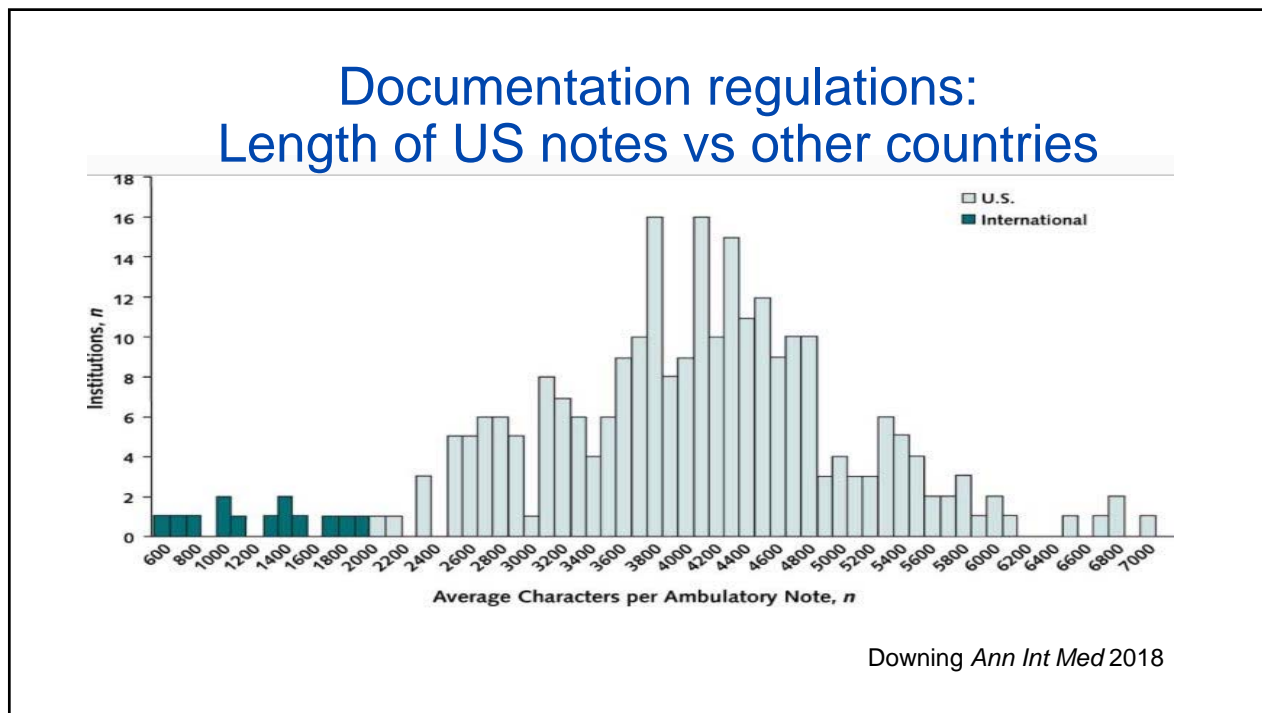
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Individual Strategies

- Identify Values
  - Debunk myth of delayed gratification
  - What matters to you most (integrate values)
  - Integrate personal and professional life

- Optimize meaning in work
  - Flow
  - Choose/focus practice

- Nurture personal wellness activities
  - Calibrate distress level
  - Self-care (exercise, sleep, regular medical care)
  - Relationships (connect w/ colleagues; personal)
  - Religious/spiritual practice
  - Mindfulness
 - Personal interests (hobbies)

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Individual Strategies

Recognition of distress:

- Medical Student Well-Being Index (Dyrbye 2010, 2011)

- Physician Well-Being Index (Dyrbye 2013, 2014)
  - https://www.mededwebs.com/well-being-index
  - Simple online 7- or 9-item instruments evaluating multiple dimensions of distress, with strong validity evidence and national benchmarks from large samples of medical students, residents, and practicing physicians
  - Evidence that physicians do not reliably self-assess their own distress
  - Feedback from self-reported Index responses can prompt intention to respond to distress

- Suicide Prevention and Depression Awareness Program (Moutier 2012)
  - Anonymous confidential Web-based screening

- AMA STEPSForward modules
  - Mini Z instrument (AMA, Linzer 2015): 10-item survey

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Physician Well-Being Index
https://www.mededwebs.com/well-being-index
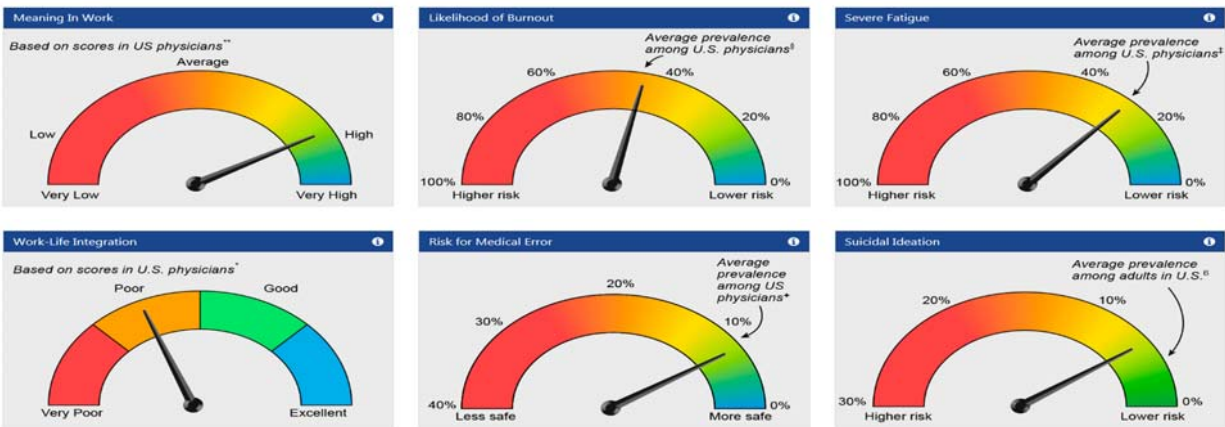
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Individual Strategies

Risk of exclusively individual focus:

- Deepen cynicism through perceived message that physicians must "toughen up" to cope with a toxic working environment, rather than addressing the toxic working environment itself.

- Blaming the victims?

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JN JAMA Network™

From: **Resilience and Burnout Among Physicians and the General US Working Population**

West CP et al., JAMA Netw Open. 2020;3(7):e209385. doi:10.1001/jamanetworkopen.2020.9385

Table 2. Resilience of Employed Physicians and the General US Population Aged 29 to 65 Years[a]

Query	No. (%) Physicians (n = 3971)	Population (n = 5198)	P value
I am able to adapt when changes occur			
Not true at all	17 (0.4)	34 (0.7)	
Rarely true	37 (0.9)	96 (1.9)	
Sometimes true	619 (15.8)	1058 (20.4)	<.001
Often true	1935 (49.4)	2401 (46.3)	
Always true	1310 (33.4)	1599 (30.8)	
Score, mean (SD)	3.14 (0.80)	3.04 (0.74)	
I tend to bounce back after illness, injury, or other hardships			
Not true at all	16 (0.4)	32 (0.6)	
Rarely true	41 (1.0)	81 (1.6)	
Sometimes true	410 (10.5)	736 (14.2)	<.001
Often true	1534 (39.3)	2273 (43.9)	
Always true	1905 (48.8)	2061 (39.8)	
Score, mean (SD)			
Total score, mean (SD)	6.49 (1.30)	6.25 (1.37)	<.001

[a] Scores are based in the Connor-Davidson Resilience Scale (score ranges from 0 to 8).

Table Title:

Resilience of Employed Physicians and the General US Population Aged 29 to 65 Years[a]

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From: **Resilience and Burnout Among Physicians and the General US Working Population**

West CP et al., JAMA Netw Open. 2020;3(7):e209385. doi:10.1001/jamanetworkopen.2020.9385

Figure Legend:
Emotional Exhaustion Scores, Depersonalization Scores, and Overall Burnout Proportions Across Levels of Resilience Among US PhysiciansError bars indicate standard error of the mean.

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Physician Resilience

- Physician do NOT have a resilience deficit overall!

- Burnout rates are lower at higher levels of resilience
  - But even at the highest possible resilience score, the burnout rate was 30%

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Physician Resilience

- What does this mean?
  - Resilience IS important, and physicians are pretty strong already – we need to maintain and even strengthen resilience where we can.

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Physician Resilience

- What does this mean?
  - Resilience IS important, and physicians are pretty strong already – we need to maintain and even strengthen our resilience where we can.
  - Individual focused solutions such as resilience training CANNOT be the mainstays to promote wellbeing, because even the most resilient among us are at substantial risk of burnout.
  - Organizational approaches to improve the working and learning environment are mandatory.

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What Can Organizations/Programs Do?

- Be value oriented
  - Promote values of the medical profession
  - Congruence between values and expectations

- Provide adequate resources (efficiency)
  - Organization and work unit level

- Promote autonomy
  - Flexibility, input, sense control

- Promote work-home integration

- Promote meaning in work

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The Evidence in Total

Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis

Colin P West, Liselotte N Dyrbye, Patricia J Erwin, Tait D Shanafelt

- Systematic review on interventions for physician burnout, commissioned by Arnold P. Gold Foundation Research Institute (West Lancet 2016):
  - 15 RCT's, 37 non-RCT's
    - Results similar for RCT and non-RCT studies

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The Evidence in Total

- **Emotional exhaustion (EE):**
  - -2.7 points, $p < 0.001$
  - Rate of High EE: -14%, $p < 0.001$
- **Depersonalization (DP):**
  - -0.6 points, $p = 0.01$
  - Rate of High DP: -4%, $p = 0.04$
- **Overall Burnout Rate:**
  - -10%, $p < 0.001$

Benefits similar for individual-focused and structural interventions
(but we need both)

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The Evidence in Total

- Individual-focused interventions:
  - Meditation techniques
  - Stress management training, including MBSR
  - Communication skills training
  - Self-care workshops, exercise program
  - Small group curricula, Balint groups
    - Community, connectedness, meaning

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The Evidence in Total

- Structural interventions:
  - Duty Hour Requirements for trainees
    - Unclear but possibly negative impact on attendings
  - Shorter attending rotations
  - Shorter resident shifts in ICU
  - Locally-developed practice interventions

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Organizational Strategies

Acknowledge and assess the problem

Harness the power of leadership

Develop and implement targeted work unit interventions

Cultivate community at work

Use rewards and incentives wisely

Align values and strengthen culture

Promote flexibility and work-life integration

Provide resources to promote resilience and self-care

Facilitate and fund organizational science

Shanafelt TD, Noseworthy JH. Mayo Clin Proc. 2017;92:129-46.

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Physician Well-Being: Approach Summary

	Individual	Organizational
Workload		
Work Efficiency/ Support		
Work-Home Integration/ Balance		
Autonomy/ Flexibility/ Control		
Meaning/Values		

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Physician Well-Being: Approach Summary

	Individual	Organizational
Workload	Part-time status	Productivity targets Duty Hour Requirements Integrated career development
Work Efficiency/ Support	Efficiency/Skills Training	EMR (+/-?) Staff support
Work-Home Integration/ Balance	Self-care Mindfulness	Meeting schedules Off-hours clinics Curricula during work hours Financial support/counseling
Autonomy/ Flexibility/ Control	Stress management/Resiliency Mindfulness Engagement	Physician engagement
Meaning/Values	Positive psychology Reflection/self-awareness Mindfulness Small group approaches	Core values Protect time with patients Promote community Work/learning climate

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Shanafelt TD, Noseworthy JH. Mayo Clin Proc. 2017;92:129-46.

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Solutions

- ACGME: http://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being

- AAIM: http://www.im.org/resources/wellness-resiliency
  - CHARM Best Practices Group summaries

- AMA: https://edhub.ama-assn.org/steps-forward

- NAM: https://nam.edu/initiatives/clinician-resilience-and-well-being/

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Organizational Strategies

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https://nam.edu/organizational-evidence-based-and-promising-practices-for-improving-clinician-well-being/

Organizational Evidence-Based and Promising
Practices for Improving Clinician Well-Being

By Christine A. Sinsky, Lee Daugherty Biddison, Aditi Mallick, Anna Legreid Dopp, Jessica
Perlo, Lorna Lynn, and Cynthia D. Smith

November 2, 2020 | Discussion Paper

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Organizational Strategies

- Organizational commitment
- Workforce assessment
- Leadership
- Policy
- Efficiency of work environment
- Support

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Organizational Strategies

- Resilience as an organizational strength
  - Not just an individual one!

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Elements of "Enlightened Leadership"

Align outcome assessment with Quadruple Aim
- Triple Aim:
  - Improve health of populations
  - Enhance patient experience of care
  - Reduce per capita cost of health care
- Quadruple Aim:
  - Improve work life of health care professionals
- Physician well-being as a quality marker
- Evaluate impact of policies on **all** aims
  - How do we define success?

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Charter on Physician Well-Being

Charter on Physician Well-being

VIEWPOINT

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Dedication to serving the interest of the patient is at the heart of medicine's contract with society. When physicians are well, they are best able to meaningfully connect with and care for patients. However, challenges to physician well-being are widespread, with problems such as dissatisfaction, symptoms of burnout, relatively high rates of depression, and increased suicide risk affecting physicians from premedical training through their professional careers. These problems are associated with suboptimal patient care, lower patient satisfaction, decreased access to care, and increased health care costs.

Addressing physician well-being benefits patients, physicians, and the health care system. Governing bodies, policy makers, medical organizations, and individual physicians share a responsibility to proactively support meaningful engagement, vitality, and fulfillment in medicine. Furthering these ideals within the culture of medicine and across its diverse members may help to strengthen health care teams and improve health care system performance.

On behalf of the Collaborative for Healing and Renewal in Medicine (see acknowledgment), we set forth guiding principles and key commitments as a framework for key groups to address physician well-being from medical training through an entire career (Box).

Governing bodies and policy makers could use this charter to help advance a high-functioning health care system by ensuring that policies and regulations align with best practices that promote physician well-being. Organizations could use this charter to help identify strategic priorities and interventions that

may, in turn, provide better patient care and practice high-quality medicine.

Physician Well-being Is Related With the Well-being of All Members of the Health Care Team
Physicians practice within a matrix of important relationships with patients, members of an interprofessional team, administrative leaders, and in some settings, learners and educators. The entire team is affected by the health of each of its members. Approaches to address physician well-being are most effective when contextualized within efforts to enhance the well-being of all health care team members.

Physician Well-being Is a Quality Marker
Enhancing physician well-being likely benefits health systems seeking to provide high-value care.[2] For example, physician burnout has been estimated to contribute one-third of the cost of physician job turnover to the health care system.[2] The "Triple Aim" for health system improvement, optimizing the care experience and population health while reducing the cost of care, should be supplemented with physician well-being, the fourth component of a "Quadruple Aim" and an essential metric that should be tracked and included in organizational performance reports. Healthy organizations use systems improvement tools to identify factors associated with reduced well-being, including assessments of physician well-being in the planning stages of systems improvement initiatives.

Physician Well-being Is a Shared Responsibility
Physician well-being requires collaboration between in-

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Charter on Physician Well-Being

- Guiding Principles
  - 1. Effective patient care promotes and requires physician well-being
  - 2. Physician well-being is related with the well-being of all members of the health care team
  - 3. Physician well-being is a quality marker
  - 4. Physician well-being is a shared responsibility

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Charter on Physician Well-Being

- Key Commitments
  - 1. Foster a trustworthy and supportive culture in medicine
  - 2. Advocate for policies that enhance well-being
  - 3. Build supportive systems
  - 4. Develop engaged leadership
  - 5. Optimize highly functioning interprofessional teams
  - 6. Anticipate and respond to inherent emotional challenges of physician work
  - 7. Prioritize mental health care
  - 8. Practice and promote self-care

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Recommendations

- We have a professional obligation to act.
  - Physician distress is a threat to our profession
  - It is unprofessional to allow this to continue
    - Evolve definition of professionalism? (West 2007)
  - SHARED RESPONSIBILITY

- We must assess distress
  - Metric of institutional performance
    - Part of the "dashboard"
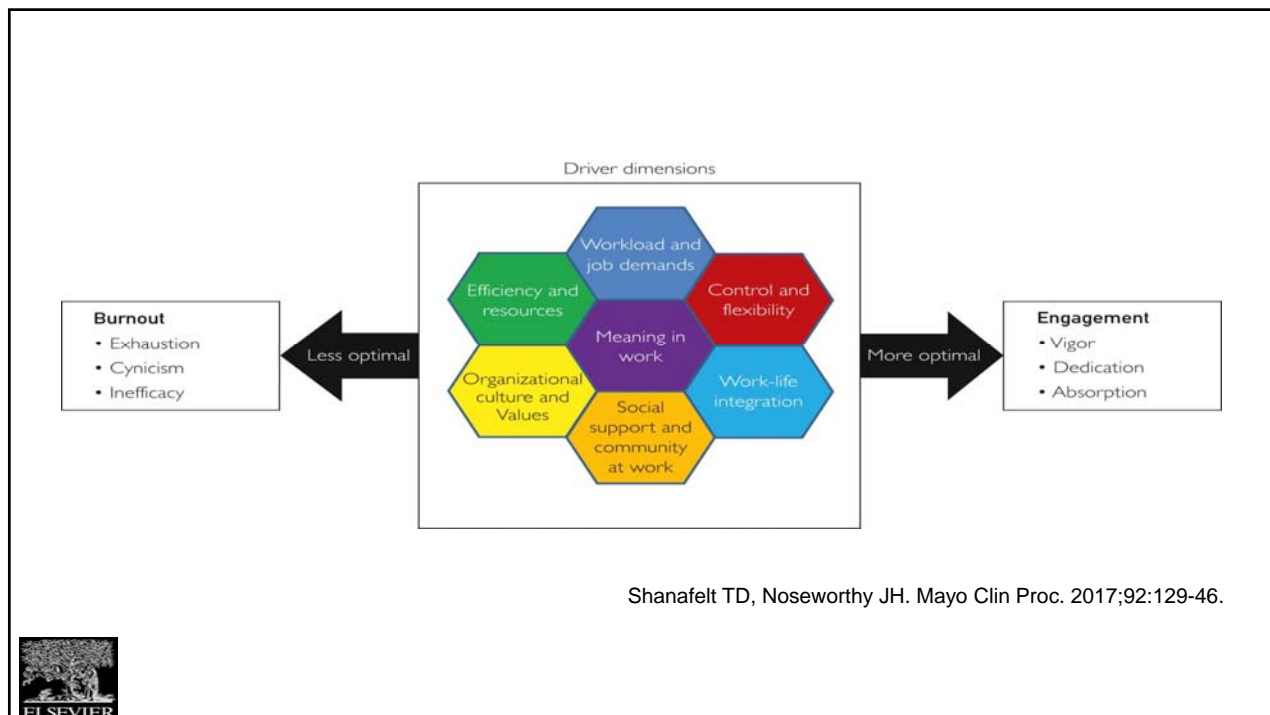 - Can be both anonymous/confidential and actionable

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Recommendations

- The toolkit for these issues will contain many different tools.

- There is no one solution …

- … but many approaches offer benefit!

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Shanafelt TD, Noseworthy JH. Mayo Clin Proc. 2017;92:129-46.

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Thank You!

- Comments/questions

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