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Physician Burnout
The Literature & Practical Perspectives

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Objectives

- Describe the extent and impact of the nation's burnout issue
- Recognize the contributors to burnout
- Describe the consequences of burnout
- Identify solutions for avoiding and managing burnout
- Save a career
- Save a life

Shanafelt, TD, et al. Burnout and Satisfaction With Work-Life Balance Among US Physicians Relative to the General US Population. Arch. Intern Med. 2012;172(18):1377-1385.

"Conclusions: Burnout is more common among physicians than among other US workers. Physicians in specialties at the front line of care access seem to be at greatest risk."

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Shanafelt, Tait D. et al. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. Mayo Clinic Proceedings , December 2015; Volume 90 , Issue 12 , 1600 - 1613

Medscape 2019 Physician Burnout Survey

- Highest Rates
  - Urology: 54 percent.
  - Neurology: 53 percent.
  - Physical medicine and rehabilitation: 52 percent.
  - Internal medicine: 49 percent.
  - Emergency medicine: 48 percent.
  - Family medicine: 48 percent.
- Lowest Rates
  - Public health and preventive medicine: 28 percent
  - Nephrology: 32 percent
  - Pathology: 33 percent.
  - Ophthalmology: 34 percent.
  - Otolaryngology: 36 percent.
  - Plastic surgery: 36 percent.

Yates, Scott W. Physician Stress and Burnout
The American Journal of Medicine, February 2020; Volume 133, Issue 2, 160 – 164.

REVIEW

THE AMERICAN JOURNAL of MEDICINE®

Physician Stress and Burnout

Scott W. Yates, MD, MBA, MS, FACP
Center for Executive Medicine, Plano, Tex.

ABSTRACT

Tens (or hundreds) of thousands of Americans die each year as a result of preventable medical errors. Changes in the practice and business of medicine have caused some to question whether burnout among physicians and other healthcare providers may adversely affect patient outcomes. A clear consensus supports the contention that burnout affects patients, albeit with low-quality objective data. The psychological and physical impact on physicians and other providers is quite clear, however, and the impact on the physician workforce (where large shortages are projected) is yet another cause for concern. We have all heard the airplane safety announcement remind us to "Please put on your own oxygen mask first before assisting others." Unfortunately, like many airline passengers (very few of whom use oxygen masks correctly when they are needed), physicians often do not recognize symptoms of burnout or depression, and even less often do they seek help. We detail the causes and consequences of physician burnout and propose solutions to increase physician work satisfaction.

 • The American Journal of Medicine (2020) 133:160–164

KEYWORDS: Burnout; Physician well-being; Quality; Workforce

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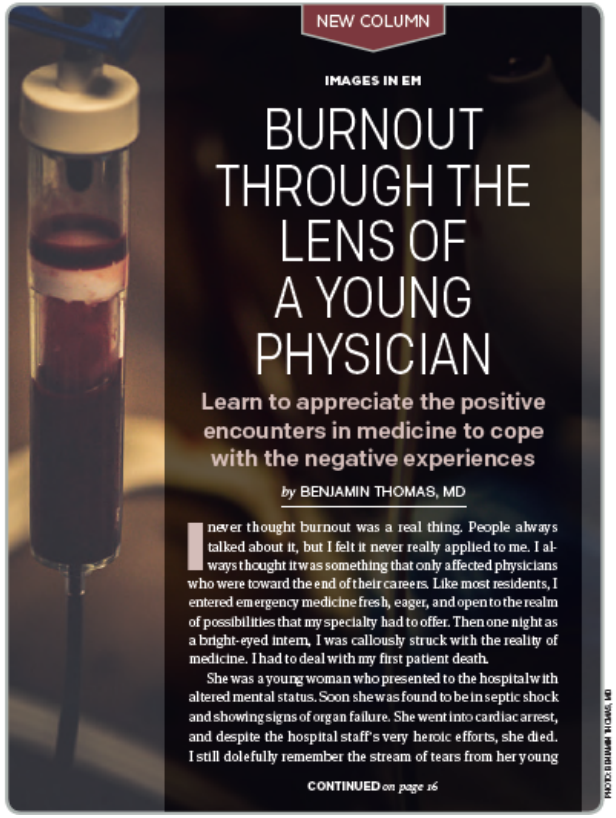

NEW COLUMN

IMAGES IN EM

BURNOUT THROUGH THE LENS OF A YOUNG PHYSICIAN

Learn to appreciate the positive encounters in medicine to cope with the negative experiences

by BENJAMIN THOMAS, MD

I never thought burnout was a real thing. People always talked about it, but I felt it never really applied to me. I always thought it was something that only affected physicians who were toward the end of their careers. Like most residents, I entered emergency medicine fresh, eager, and open to the realm of possibilities that my specialty had to offer. Then one night as a bright-eyed intern, I was callously struck with the reality of medicine. I had to deal with my first patient death.

She was a young woman who presented to the hospital with altered mental status. Soon she was found to be in septic shock and showing signs of organ failure. She went into cardiac arrest, and despite the hospital staff's very heroic efforts, she died. I still dolefully remember the stream of tears from her young

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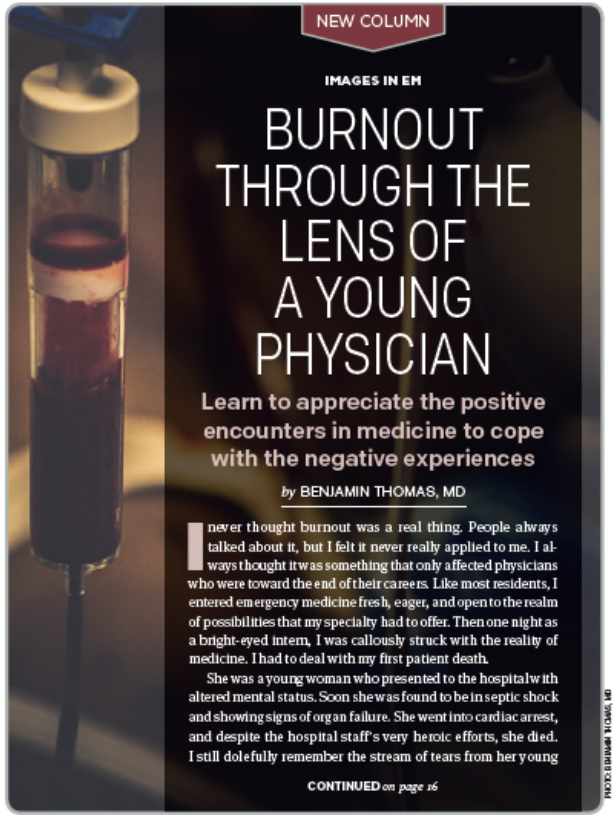

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PHOTO: BENJAMIN THOMAS, MD

"The account by Dr. Thomas is very moving and insightful – but it isn't burnout. He's not even out of residency. This is a matter of questioning the appropriateness of his chosen field. If you don't want to deal with death on a regular basis, then ophthalmology or dermatology might be a better choice. Or perhaps even a field outside medicine. Burnout begins about 15 years into your career when you are, indeed, physically worn down, when you realize that the head of your ER group is not at all concerned with standing up to the administration on your behalf but is interested only in maintaining his/her hospital contract which could mean throwing you to the wolves if it is expedient."

Frajerman, Ariel, Yannick Morvan, Marie-Odile Krebs, Philip Gorwood, and Boris Chaumette. "Burnout in medical students before residency: a systematic review and meta-analysis." European Psychiatry 55 (2019): 36-42.

Results: Prevalence of current burnout was extracted from 24 studies encompassing **17,431 medical students**. Among them, **8060 suffered from burnout** and we estimated the **prevalence to be 44.2**% [33.4%–55.0%]. The information about the prevalence of each subset of burnout dimensions was given in nine studies including 7588 students. Current prevalence was estimated to be **40.8% for 'emotional exhaustion'** [32.8%–48.9%], **35.1% [27.2%–43.0%] for 'depersonalization' and 27.4% [20.5%–34.3%] for 'personal accomplishment'.** There is **no significant gender difference in burnout.** The prevalence of burnout is slightly different across countries with a higher prevalence in Oceania and the Middle East than in other continents.

Emergency medicine resident well-being: stress and satisfaction

W. Hoonpongsimanont[1], M. Murphy[2], C. H. Kim[1], D. Nasir[3] and S. Compton[2]

[1]Center for Trauma and Injury Prevention Research, University of California, Irvine School of Medicine, Irvine, CA, USA, [2]Department of Emergency Medicine, UMDNJ-New Jersey Medical School, Newark, NJ, USA, [3]Department of Emergency Medicine, University of California, Irvine School of Medicine, Irvine, CA, USA.

Correspondence to: W. Hoonpongsimanont, University of California, Irvine School of Medicine, 101 The City Drive South, Orange, CA 92868, USA. Tel: +1 714 456-1672; e-mail: whoonpon@uci.edu

Background	Emergency medicine (EM) residents are exposed to many work-related stressors, which affect them both physically and emotionally. It is unknown, however, how EM residents perceive the effect of these stressors on their well-being and how often they use unhealthy coping mechanisms to manage stress.
Aims	To evaluate EM residents' perceptions of stressors related to their overall well-being and the prevalence of various coping mechanisms.
Methods	An online survey instrument was developed to gauge resident stress, satisfaction with current lifestyle, stress coping mechanisms and demographics. A stratified random sample of EM residents from three postgraduate years (PGY-I, PGY-II and PGY-III) was obtained. Descriptive statistics and one-way analysis of variance were used to compare residents across PGY level.
Results	There were 120 potential participants in each of the three PGYs. The overall response rate was 30% (109) with mean age of 30 and 61% were male. On a 0–4 scale (0 = completely dissatisfied), respondents in PGY-I reported significantly less satisfaction with lifestyle than those in PGY-II and III (mean rating: 1.29, 1.66 and 1.70, respectively; $P < 0.001$). There were no significant differences in mean ratings between PGYs on each of the other stress categories: work relationships (1.37), work environment (1.10) and response to patients (1.08). Residents reported exercise (94%), hobbies (89%) and use of alcohol (71%) as coping methods.
Conclusions	Residents reported low satisfaction with current lifestyle. This dissatisfaction was unrelated to perceived work-related stress. Some undesirable coping methods were prevalent, suggesting that training programs could focus on promotion of healthy group activities.
Key words	Alcohol; coping mechanism; emergency medicine resident; lifestyle satisfaction; residency training; stress management; well-being; wellness; work stressors; workplace health promotion.

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Adriaenssens J., et al., Determinants and prevalence of burnout in emergency nurses: A systematic review of 25 years of research. Int. J. Nurs. Stud. (2014), http://dx.doi.org/10.1016/j.ijnurstu.2014.11.004

Seventeen studies were included in this review. On average **26% of the emergency nurses suffered from burnout.** Individual factors such as demographic variables, personality characteristics and coping strategies were predictive of burnout. Work related factors such as exposure to traumatic events, job characteristics and organizational variables were also found to be determinants of burnout in this population.

WHO, May 28, 2019: Recognized Occupational Phenomenon

- "Burn-out is a syndrome conceptualized as resulting from chronic workplace stress that has not been successfully managed. It is characterized by three dimensions:
  - feelings of energy depletion or exhaustion;
  - increased mental distance from one's job, or feelings of negativism or cynicism related to one's job; and
  - reduced professional efficacy.
- Burn-out refers specifically to phenomena in the occupational context and should not be applied to describe experiences in other areas of life."

Self-Reporting
The American Disabilities Act

- The ADA defines a covered disability as,
  - A physical or mental impairment that substantially limits one or more of the major life activities of the individual,
  - A record of such impairment, or
  - Being regarded as having such impairment.
- “The term 'qualified individual with a disability' shall not include any employee or applicant who is currently engaging in the illegal use of drugs, when the covered entity acts on the basis of such use." 42 U.S.C. § 12114(a)

Patel RS, Bachu R, Adikey A, Malik M, Shah M. Factors Related to Physician Burnout and Its Consequences: A Review. *Behav Sci (Basel)*. 2018;8(11):98. Published 2018 Oct 25.

Work Factors: Loss of autonomy, medical malpractice risk, EMRs, time spent at home on work-related activities

Personal Characteristics: Self-critical, engaging in unhelpful coping strategies, sleep deprivation, over commitment, perfectionism, idealism and work–life imbalance, and an inadequate support system

Organizational Factors: Negative leadership behaviors, work load expectations, insufficient rewards, limited interpersonal collaboration, and limited opportunities for advancement and social support

Copeland, Darcy et al. The relationship between workplace violence, perceptions of safety, and Professional Quality of Life among emergency department staff members in a Level 1 Trauma Centre. International Emergency Nursing, January 17, 2018.

All three dimensions of Professional Quality of Life were associated with exposure to non-physical patient violence including: general threats (CS p = .012, BO p = .001, STS p = .035), name calling (CS p = .041, BO p = .021, STS p = .018), and threats of lawsuit (CS p = .001, BO p = .001, STS p = .02). Tolerance to violence was associated with BO (p = .004) and CS (p = .001); perception of safety was associated with BO (p = .018).

Iris Schrijver. Pathology in the Medical Profession?: Taking the Pulse of Physician Wellness and Burnout. Archives of Pathology & Laboratory Medicine: September 2016, Vol. 140, No. 9, pp. 976-

Table 2. Factors That May Influence the Development of Burnout Symptoms Among Physicians

Main Categories of Factors	Examples of Contributing Issues
Chronic fatigue	Excessive work load
	Sleep deprivation
	Constant access demands (eg, electronic availability)
	Decreased personal time
Perceived threats	Malpractice lawsuits
	Patient violence
	Medical error
	Reduced compensation
	Limited control over the practice
	Increased regulatory and maintenance requirements
	Research funding climate
Loss of autonomy	Practice environment
	Time to interact with patients constrained
	Misalignment with the work aspects perceived to be the most meaningful (career fit)
Inefficiencies	Administrative requirements
	Lack of support staff
	Practice organization/work flow
Balancing needs	Suboptimal integration of work and life responsibilities
	Clinical service requirements and additional demands, eg, in research, teaching, and administration
Chronic stress	Work pace
	Practice setting
	Degree of chaos/unpredictability in the workplace
New technologies	Electronic medical health records (IT)
	Keeping up with technology advances in the practice
	Expectation of adoption and integration of virtual communication and social media tools
Alignment of goals and values	Interests competing with patient care delivery
	• Physicians and leaders/institution
	• Physicians and payors
Physician factors	Negligence regarding personal health and well-being
	Perfectionism
	Internal drive and ambition

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Research Paper

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2. Graduate Institute of Injury Prevention and Control, Taipei Medical University, Taiwan;
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6. School of Law, Chung Yuan Christian University, Taiwan;
7. Long-term Care Insurance Preparatory Task Force, Department of Health, Taiwan.

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Received: 2013.05.22; Accepted: 2013.08.23; Published: 2013.08.28

Abstract

Objectives: Our objective was to estimate the incidence of recent burnout in a large sample of Taiwanese physicians and analyze associations with job related satisfaction and medical malpractice experience.

Methods: We performed a cross-sectional survey. Physicians were asked to fill out a questionnaire that included demographic information, practice characteristics, burnout, medical malpractice experience, job satisfaction, and medical error experience. There are about 2% of total physicians. Physicians who were members of the Taiwan Society of Emergency Medicine, Taiwan Surgical Association, Taiwan Association of Obstetrics and Gynecology, The Taiwan Pediatric Association, and Taiwan Stroke Association, and physicians of two medical centers, three metropolitan hospitals, and two local community hospitals were recruited.

Results: There is high incidence of burnout among Taiwan physicians. In our research, Visiting staff (VS) and residents were more likely to have higher level of burnout of the emotional exhaustion (EE) and depersonalization (DP), and personal accomplishment (PA). There was no difference in burnout types in gender. Married had higher-level burnout in EE. Physicians who were 20~30 years old had higher burnout levels in EE, those 31~40 years old had higher burnout levels in DP, and PA. Physicians who worked in medical centers had a higher rate in EE, DP, and who worked in metropolitan had higher burnout in PA. With specialty-in-training, physicians had higher-level burnout in EE and DP, but lower burnout in PA. Physicians who worked 13-17hr continuously had higher-level burnout in EE. Those with ≥41 times/week of being on call had higher-level burnout in EE and DP. Physicians who had medical malpractice experience had higher-level burnout in EE, DP, and PA. Physicians who were not satisfied with physician-patient relationships had higher-level burnout than those who were satisfied.

Conclusion: Physicians in Taiwan face both burnout and a high risk in medical malpractice. There is high incidence of burnout among Taiwan physicians. This can cause shortages in medical care human resources and affect patient safety. We believe that high burnout in physicians was due to long working hours and several other factors, like mental depression, the evaluation assessment system, hospital culture, patient-physician relationships, and the environment. This is a very important issue on public health that Taiwanese authorities need to deal with.

Key words: Physician burnout, Medical malpractice, Job Satisfaction, Duty hour limitation.

Balch, Charles M. et al. Personal Consequences of Malpractice Lawsuits on American Surgeons Journal of the American College of Surgeons , November 2011; Volume 213 , Issue 5 , 657 - 667

Recent malpractice suits were strongly related to burnout ($p < 0.0001$), depression ($p < 0.0001$), and recent thoughts of suicide ($p < 0.0001$) among surgeons. In multivariable modeling, both depression (odds ratio = 1.273; $p = 0.0003$) and burnout (odds ratio = 1.168; $p = 0.0306$) were independently associated with a recent malpractice suit after controlling for all other personal and professional characteristics.

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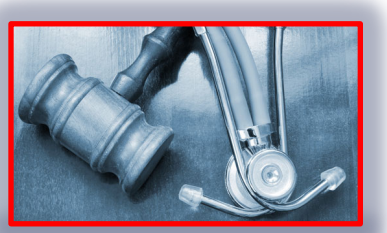
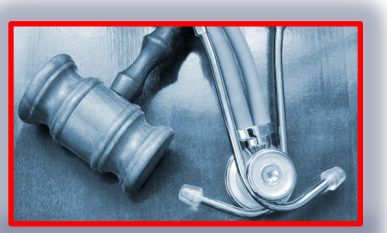


Shanafelt, Tait D., et al. "Burnout and medical errors among American surgeons." *Annals of surgery* 251.6 (2010): 995-1000.

Conclusions: Major medical errors reported by surgeons are strongly related to a surgeon's degree of burnout and their mental QOL.

Bragard I, Dupuis G, Fleet R. Quality of work life, burnout, and stress in emergency department physicians. Eur J Emerg Med 2015; 22:227–234.

Internal stressors: Worrying about making mistakes, and Worrying about medical malpractice



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Internal stressors: Worrying about making mistakes, and Worrying about medical malpractice

Wu Albert W. Medical error: the second victim. The doctor who makes the mistake needs help too. BMJ 2000; 320 :726

Shanafelt, Tait D., et al. Relationship Between Clerical Burden and Characteristics of the Electronic Environment With Physician Burnout and Professional Satisfaction. Mayo Clinic Proceedings, July 2016 Volume 91, Issue 7 , 836 – 848.

Physicians who used EHRs and CPOE had lower satisfaction with the amount of time spent on clerical tasks and higher rates of burnout on univariate analysis. **On multivariable analysis, physicians who used EHRs (odds ratio [OR]=0.67; 95% CI, 0.57-0.79; *P*<.001) or CPOE (OR=0.72; 95% CI, 0.62-0.84; *P*<.001) were less likely to be satisfied with the amount of time spent on clerical tasks** after adjusting for age, sex, specialty, practice setting, and hours worked per week. Use of **CPOE was also associated with a higher risk of burnout after adjusting for these same factors (OR=1.29**; 95% CI, 1.12-1.48; *P*<.001). Use of EHRs was not associated with burnout in adjusted models controlling for CPOE and other factors.

Wright AA, Katz IT. Beyond Burnout - Redesigning Care to Restore Meaning and Sanity for Physicians. N Engl J Med. 2018 Jan 25;378(4):309-311.

"We're spending our days doing the wrong work" Christine Sinsky

"But physicians are working a staggering number of hours at night, and
this has enabled organizations to continuously increase productivity targets without changing the infrastructure or support system, effectively adding a whole extra work week hidden within a month." Tait Shanafelt

"Physicians with symptoms of burnout are more likely to report having made a major medical error in the past 3 months and to receive lower patient-satisfaction scores." Alexi Wright

McCain RS, McKinley N, Dempster M, Campbell WJ, Kirk SJ. A study of the relationship between resilience, burnout and coping strategies in doctors. Postgrad Med J. 2017 Aug 9.

"Results: 283 doctors were included. Mean resilience was 68.9, higher than population norms. 100 (37%) doctors had high burnout, 194 (72%) doctors had high secondary traumatic stress and 64 (24%) had low compassion satisfaction."

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Younger age, identifying as an ethnic minority, and psychological flexibility predicted resiliency among program faculty, while there were no statistically significant predictors of resilience among the resident physicians.

Buck K, Williamson M, Ogbeide S, Norberg B. Family Physician Burnout and Resilience: A Cross-Sectional Analysis. Fam Med. 2019;51(8):657-663. https://doi.org/10.22454/FamMed.2019.424025.

Varpio L, Ray R, Dong T, Hutchinson J, Durning SJ. Expanding the Conversation on Burnout Through Conceptions of Role Strain and Role Conflict. J Grad Med Educ. 2018 Dec;10(6):620-623.

A new spin?

"Role strain is the tension experienced when a scarcity of resources (e.g., time, skills, finances, and/or energy) impedes an individual's ability to meet role expectations and responsibilities."

"An individual experiences role conflict when one role clashes with the demands of other roles.12 For example, the resident role can obstruct an individual's ability to fulfill the expectations of his or her parent role."

fsmb
FEDERATION OF STATE MEDICAL BOARDS

Physician Wellness and Burnout

Report and Recommendations of the Workgroup on Physician Wellness and Burnout

Adopted as policy by the Federation of State Medical Boards
April 2018

Executive Summary:

The Federation of State Medical Boards (FSMB) Workgroup on Physician Wellness and Burnout was convened in April of 2016 by FSMB Chair Arthur S. Hengerer, M.D. to identify resources and strategies to address physician burnout.

While the Workgroup examined the issue of physician burnout from a broad perspective, reviewing as many facets of this complex issue as possible, including existing research, resources, and strategies for addressing it, the recommendations for state medical and osteopathic boards (hereinafter referred to collectively as "state medical boards") found in this report focus first and foremost on the licensing process. The Workgroup also saw fit to include commentary and recommendations on several other aspects of physician wellness and burnout, though some of these areas may not be under the direct purview of the FSMB or its member boards. The FSMB recognizes the importance of collaboration for effectively supporting physicians and protecting patients in the face of circumstances that lead to burnout, which is ultimately a patient safety issue. A shared accountability model that includes responsibilities to be carried out by providers from all the health professions, including physicians and physician assistants, and with organizations from across the health care community is therefore recommended as the most promising course of action to address this important issue.

Recommendations for state medical boards related to the licensing process include considering whether it is necessary to include probing questions about a physician applicant's mental health, addiction, or substance use on applications for medical licensure or their renewal, and whether the information these questions are designed to elicit, ostensibly in the interests of patient safety, may be better obtained through means less likely to discourage treatment-seeking among physician applicants.

Where member boards strongly feel that questions addressing the mental health of physician applicants must be included on medical licensing applications, several recommendations are included in this report for the appropriate phrasing of such questions, including focusing only on current impairment, which may be more meaningful in the context of a physician's ability to provide safe care to patients in the immediate future.

State medical boards are also encouraged to approach physician wellness and burnout from a non-punitive perspective, avoiding public disclosure of any information about a physician's diagnosis during licensing processes and offering "safe haven" non-reporting

1

For State Medical Boards:

1. The FSMB recommends that state medical boards review their medical licensure (and renewal) applications and **evaluate whether it is necessary to include probing questions about a physician applicant's mental health, addiction, or substance use**, and whether the information these questions are designed to elicit in the interests of patient safety may be obtained through means that are less likely to discourage treatment-seeking among physician applicants. For example, some boards subscribe to notification services such as the National Practitioner Data Bank's "Continuous Query" service or other data services that provide information about arrests or convictions, including for driving under the influence, within their states which can serve as a proxy finding for physician impairment. The FSMB also recommends in its *Essentials of a State Medical and Osteopathic Practice Act* that boards require applicants to satisfactorily pass a criminal background check as a condition of licensure.[56]

Katie Arnhart, Michael R. Privitera, Eric Fish, Aaron Young, Arthur S. Hengerer, Humayun J. Chaudhry, Frank Dowling, Caroline Gomez-Di Cesare, Fouad Atallah & Mark Staz(2019) Physician Burnout and Barriers to Care on Professional Applications, Journal of Legal Medicine, 39:3, 235-246, DOI: 10.1080/01947648.2019.1629364

PRIVATE MATTERS?

An honest admission of depression led to a 10-year fight to defend my medical license

by SUSAN T. HANEY, MD, FACEP, FAAEM

I am a board-certified emergency physician licensed to practice medicine in Oregon since 2001. I am a competent and caring physician. I have never been accused of professional misconduct or incompetence, and I have never been sued for malpractice.


Susan Haney, MD, FACEP, FAAEM

I also have a history of recurrent episodes of major depression. Up until 10 years ago, I managed my depression privately without interference or oversight from any medical licensing board. I had never been hospitalized because of mental illness. I had never missed a day of work due to mental illness.

While on vacation in March 2006, I had a severe asthma exacerbation that required

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"Overly intrusive questions, though well intentioned to protect the public, may run counter to current interpretations of federal law and may inhibit care-seeking among physicians, which is critical to both patient safety and physician health."

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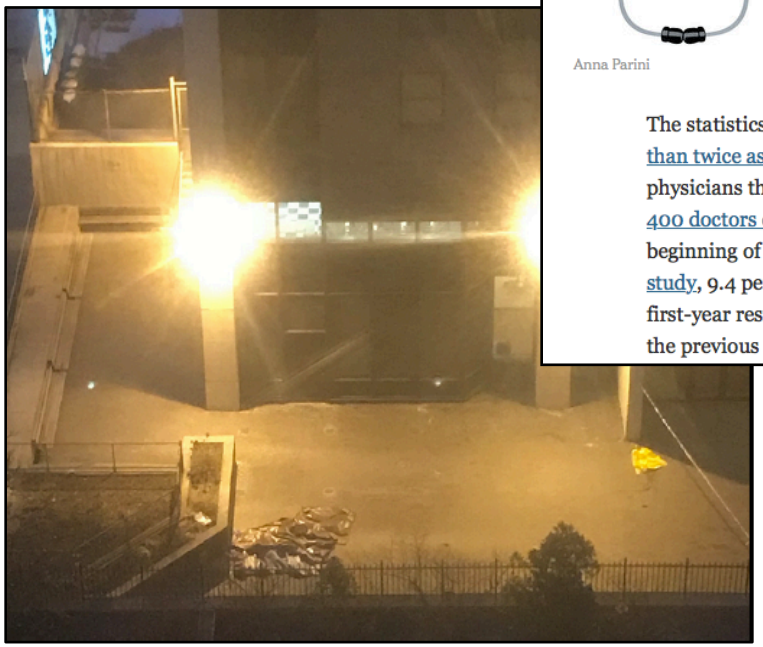
Burnout leads to …

- Mental health disorders
  - Depression
  - Anxiety
  - Substance abuse/dependence
  - ***SUICIDE***

16.8% of those seeking addiction Tx …

Bakhshani NM. et al. / Procedia Social and Behavioral Sciences 5 (2010) 1982–1985.



Why Do Doctors Commit Suicide?

By PRANAY SINHA SEPT. 4, 2014

Anna Parini

NEW HAVEN — TWO weeks ago, two medical residents, in their sec
training in different p
deaths in separate inc
not know them, and c
them or their circums
they had celebrated th
this spring just as my
they began their resid
enthusiasm for healin
that they experienced
and crippling self-dou
residencies — I know

The statistics on physician suicide are frig
than twice as likely to kill themselves as n
physicians three times more likely than th
400 doctors commit suicide every year. Yo
beginning of their training are particularly
study, 9.4 percent of fourth-year medical s
first-year residents are called — reported l
the previous two weeks.

THE DAILY BEAST POLITICS ENTERTAINMENT WORLD

PHOTO ILLUSTRATION BY SARAH ROGERS/THE DAILY BEAST

SILENT EPIDEMIC

American Doctors Are Killing Themselves and No One Is Talking About It

It's estimated that at least 400 U.S. doctors kill themselves every year. Many are struggling with depression, anxiety, or addiction.

The pain of living is greater than the prospect of giving up.

It is not an act of cowardice.

Self devaluation and pain are so great, their solution is to not exist anymore.

This is an act of true desperation, that can only be fully appreciated by those feeling such anguish.

Those who succeed can no longer tell their stories.

Lost stories are lost opportunities to understand.

Aren’t we in the business of saving lives?

Han, Shasha & Shanafelt, Tait & A. Sinsky, Christine & M. Awad, Karim & N. Dyrbye, Liselotte & C. Fiscus, Lynne & Trockel, Mickey & Goh, Joel. (2019). Estimating the Attributable Cost of Physician Burnout in the United States. Annals of Internal Medicine. 170. 10.7326/M18-1422.

On a national scale, the conservative base-case model estimates that approximately **$4.6 billion in costs related to physician turnover and reduced clinical hours is attributable to burnout** each year in the United States. This **estimate ranged from $2.6 billion to $6.3 billion** in multivariate probabilistic sensitivity analyses. At an organizational level, the annual economic cost associated with burnout related to turnover and reduced clinical hours is approximately **$7600 per employed physician each year.**

Willard-Grace R, Knox M, Huang B, Hammer H, Kivlahan C, Grumbach K. Burnout and Health Care Workforce Turnover. Ann Fam Med. 2019 Jan;17(1):36-41.

"**RESULTS** Prevalence of burnout, low engagement, and turnover were high, with **53% of both clinicians and staff reporting burnout, only 32% of clinicians and 35% of staff reporting high engagement, and 30% of clinicians and 41% of staff no longer working in primary care in the same system 2 to 3 years later. Burnout predicted clinician turnover** (adjusted **odds ratio = 1.57**; 95% CI, 1.02-2.40); there was also a strong trend whereby low engagement predicted clinician turnover (adjusted odds ratio with **high engagement = 0.58**; 95% CI, 0.33-1.04). Neither measure significantly predicted turnover for staff."

West CP, Dyrbye LN, Shanafelt TD. Physician burnout: contributors, consequences and solutions. J Intern Med. 2018 Jun;283(6):516-529.

JIM Review

Click here to view the Editorial Comment by R. Tyssen

doi: 10.1111/joim.12752

Physician burnout: contributors, consequences and solutions

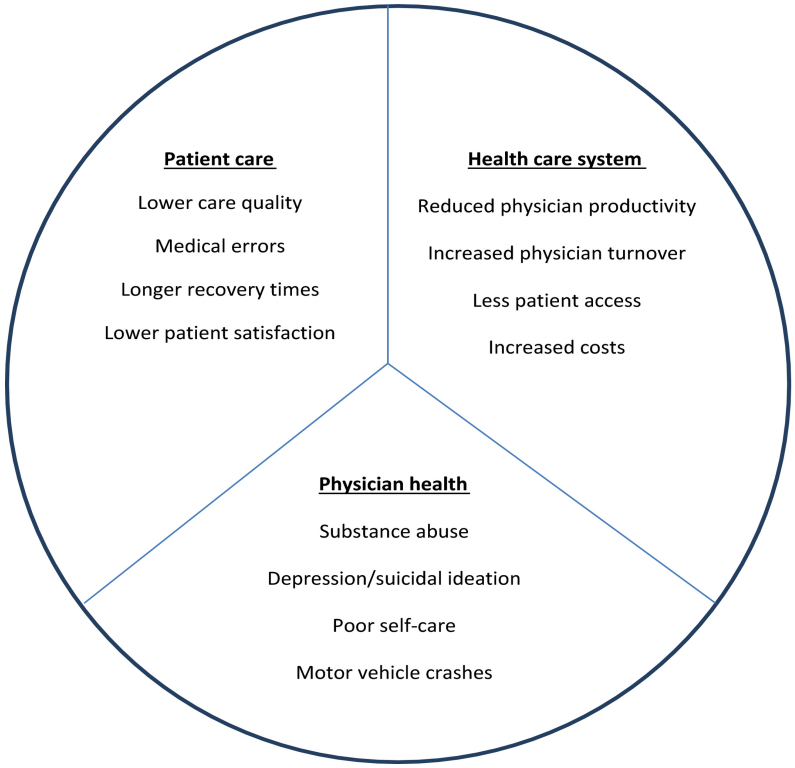
C. P. West[1,2], L. N. Dyrbye[1] & T. D. Shanafelt[3]

From the [1]Department of Medicine; [2]Department of Health Sciences Research, Mayo Clinic, Rochester, MN; and [3]Department of Medicine, Stanford University Medical Center, Stanford, CA, USA

Abstract. West CP, Dyrbye LN, Shanafelt TD. (Mayo Clinic, Rochester, MN; and Stanford University Medical Center, Stanford, CA, USA). Physician burnout: contributors, consequences and solutions (Review). *J Intern Med* 2018; **283**: 516–529.

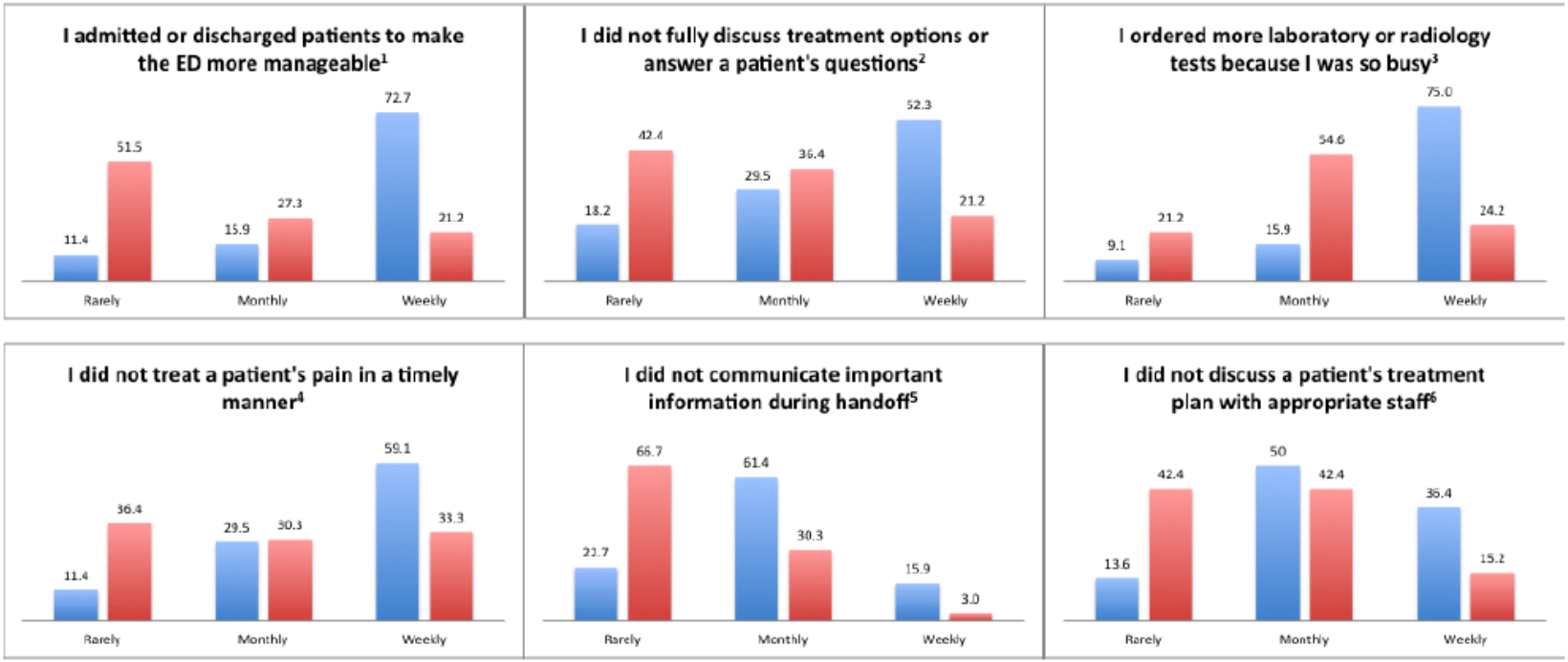
Physician burnout, a work-related syndrome involving emotional exhaustion, depersonalization and a sense of reduced personal accomplishment, is prevalent internationally. Rates of burnout symptoms that have been associated with adverse effects on patients, the healthcare workforce, costs and physician health exceed 50% in studies of both physicians-in-training and practicing physicians. This problem represents a public health crisis with negative impacts on individual physicians, patients and healthcare organizations and systems. Drivers of this epidemic are largely rooted within healthcare organizations and systems and include excessive workloads, inefficient work processes, clerical burdens, work–home conflicts, lack of input or control for physicians with respect to issues affecting their work lives, organizational support structures and leadership culture. Individual physician-level factors also play a role, with higher rates of burnout commonly reported in female and younger physicians. Effective solutions align with these drivers. For example, organizational efforts such as locally developed practice modifications and increased support for clinical work have demonstrated benefits in reducing burnout. Individually focused solutions such as mindfulness-based stress reduction and small-group programmes to promote community, connectedness and meaning have also been shown to be effective. Regardless of the specific approach taken, the problem of physician burnout is best addressed when viewed as a shared responsibility of both healthcare systems and individual physicians. Although our understanding of physician burnout has advanced considerably in recent years, many gaps in our knowledge remain. Longitudinal studies of burnout's effects and the impact of interventions on both burnout and its effects are needed, as are studies of effective solutions implemented in combination. For medicine to fulfil its mission for patients and for public health, all stakeholders in healthcare delivery must work together to develop and implement effective remedies for physician burnout.

Keywords: burnout, healthcare delivery, physician health, physician impairment, professional, well-being.



Lu DW, Dresden S, McCloskey C, Branzetti J, Gisondi MA. Impact of Burnout on Self-Reported Patient Care Among Emergency Physicians. *Western Journal of Emergency Medicine*. 2015;16(7):996-1001.

Figure 1. Percentage of emergency physicians and their self-reported frequencies of suboptimal care by burnout. Blue=Burnout; Red=No burnout.



Lacy BE, Chan JL. Physician Burnout: The Hidden Health Care Crisis. Clin Gastroenterol Hepatol. 2018 Mar;16(3):311-317.

"If unrecognized, the costs to the physician and to the health care system can be enormous because physician burnout is associated with increased rates of depression, alcohol and drug abuse, divorce, suicide, medical errors, difficult relationships with coworkers, and patient dissatisfaction, as well as physician attrition."

Schwenk TL. Physician Well-being and the Regenerative Power of Caring. JAMA. 2018 Apr 17;319(15):1543-1544.

"In 1948, Life magazine published what has become an iconic and, for many, nostalgic photograph essay depicting the life and work of Dr. Ernest Ceriani, a Colorado general practitioner.1 Among the 38 photographs is one of Dr. Ceriani attempting to save the eye of a 2-year-old girl who was kicked by a horse, another of him carrying an 85-year-old man to the operating room to amputate a gangrenous leg, and another showing him holding a newly delivered infant. His expressive face shows anguish, anxiety, uncertainty, and exhaustion and triumph. Nowhere in the article does the word "burnout" appear."

Muse S (2018) The resilient physician: sustaining the healing partnership. Ment Health Addict Res 3: DOI: 10.15761/MHAR.1000151

"Some 3-400 U.S. physicians die by suicide every year or the loss of a doctor a day. Suicide rates for male physicians are 70% higher and 250-400% higher for females when compared with the general population (including other Professionals)."

"Depression affects 39% of physicians at some point in their career, twice the rate of the general population."

Healing Partnership

1) "The first principle of the "physician as person" framework is that encounters with patients occur primarily between two people."

2) "The power of being vulnerable, of opening up and letting patients and colleagues see your imperfect humanity- apologizing, having tears, and sharing moments of pain- cannot be overstated and further reinforces the physician as person."

When We Say 'Physician Burnout,' We Really Mean Depression
Irvin Schonfeld, PhD, MPH, Medscape; July 03, 2018.

- Dr. Privitera observes that a physician may face career barriers if he or she admits to being depressed. Although true in many instances, such a situation does not support the view that burnout and depression are separate entities.
- The work-related causes of burnout and depression are essentially the same.
- Emotional exhaustion is considered the core of burnout.[6] When emotional exhaustion and depression are treated dimensionally, their correlations, when corrected for measurement error, equal or exceed .80.

Thimmapuram, J. R., Grim, R., Bell, T., Benenson, R., Lavallee, M., Modi, M., ... & Salter, R. (2019). Factors Influencing Work–Life Balance in Physicians and Advance Practice Clinicians and the Effect of Heartfulness Meditation Conference on Burnout. Global advances in health and medicine, 8, 2164956118821056.

Results: Of the **1393 physicians and APCs, 537** responded to the aMBI, and there were **414 comments (663 factors) for the question on work–life balance**. Among the respondents, **60.5% and 32% had symptoms of moderate to severe emotional exhaustion (EE) and depersonalization, respectively. Twenty-eight percent of the respondents had symptoms of moderate to low personal accomplishment.** The major factors impacting work–life balance included **work load, work flow, and scheduling**. A follow-up aMBI survey was completed by 79 from the conference group and 264 from the nonconference group. In the **age-group between 30 and 50 for the conference group (n = 40), mean EE decreased from 9.8 to 8.6 with statistical significance (P = .014).** There was no statistically significant change in the nonconference group in any age-group.

Card AJ. Physician Burnout: Resilience Training is Only Part of the Solution. Ann Fam Med. 2018 May;16(3):267-270.

"Resilience training may be helpful in addressing unavoidable suffering, but it is the wrong treatment for the organizational pathologies that lead to avoidable suffering and may even compound the harm doctors experience. To address avoidable suffering, health systems would be better served by engaging doctors in the co-design of work systems that promote better mental health outcomes."

Fred HL, Scheid MS. Physician Burnout: Causes, Consequences, and Cures. Tex Heart Inst J. 2018 Aug 1;45(4):198-202. doi: 10.14503/THIJ-18-6842.

"Investigators estimate that, when physicians leave the field, the practice loses $500,000 to $1,000,000 of revenue. This loss is even greater in high-paying specialties. To recruit a replacement costs an additional $90,000."

"Because of burnout's variable nature, there is no consensus for preventing, treating, or curing it. Most "cures" focus on stress-reduction training rather than on the systemic factors that produce burnout."

"Re-engineering current EHRs will be difficult. In fact, Zulman and colleagues concluded that, in many clinical situations, patient care could be improved simply
by "deimplementing" the EHR."

Coping With Medical Mistakes and Errors in Judgment

Richard M. Goldberg, MD*
Gloria Kuhn, DO‡
Louise B. Andrew, MD, JD§
Harold A. Thomas, Jr., MD‖

From the Department of Emergency Medicine, Los Angeles County+ University of Southern California Medical Center, Los Angeles, CA; the Department of Emergency Medicine, Virginia Commonwealth Health System, Medical College of Virginia, Richmond, VA†; Center for Professional Well-Being, Durham, NC§; and the Department of Emergency Medicine, Oregon Health Sciences University, Portland, OR.‖*

Received for publication March 19, 2001. Revisions received September 27, 2001, and November 13, 2001. Accepted for publication December 2, 2001.

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0196-0644/2002/$35.00 + 0
47/1/121995
doi:10.1067/mem.2002.121995

See related articles, p. 329 and p. 344.

Attention has recently been focused on medical errors as a cause of morbidity and mortality in clinical practice. Although much has been written regarding the cognitive aspects of decisionmaking and the importance of systems management as an approach to medical error reduction, little consideration has been given to the emotional impact of errors on the practitioner. Evidence exists that errors are common in clinical practice and that physicians often deal with them in dysfunctional ways. However, there is no general acknowledgment within the profession of the inevitability of medical errors or of the need for practitioners to be trained in their management. This article focuses on the affective aspects of physician errors and presents a strategy for coping with them.

[Goldberg RM, Kuhn G, Andrew LB, Thomas HA Jr. Coping with medical mistakes and errors in judgment. *Ann Emerg Med.* March 2002;39:287-292.]

> "While moonlighting in an emergency room, a resident physician evaluated a 35-year-old woman who was 6 months pregnant and complaining of a headache. The physician diagnosed a 'mixed-tension sinus headache.' The patient returned to the ER 3 days later with an intracerebral bleed, presumably related to eclampsia, and died."[1]

With its report *To Err Is Human: Building a Safer Health System*[2] the prestigious Institute of Medicine has focused the spotlight of public opinion on errors in medical practice. The report estimates that at least 44,000 patients die annually of medical errors, making them the eighth leading cause of death nationwide, ahead of motor vehicle crashes, breast cancer, and AIDS.[3] The idea that errors in health care are a major health problem has prompted a great deal of reaction by the medical community, and the specialty of emergency medicine is no exception. Both

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Figure.
Coping with mistakes and errors in judgment.

1. Accept responsibility for the mistake.
2. Discuss with colleagues.
3. Disclose and apologize to the patient.
4. Conduct an error analysis.
5. Make changes in practice or practice setting designed to reduce future errors.
6. Work at local and national levels to change the culture of the medical profession with regard to the management of medical mistakes.

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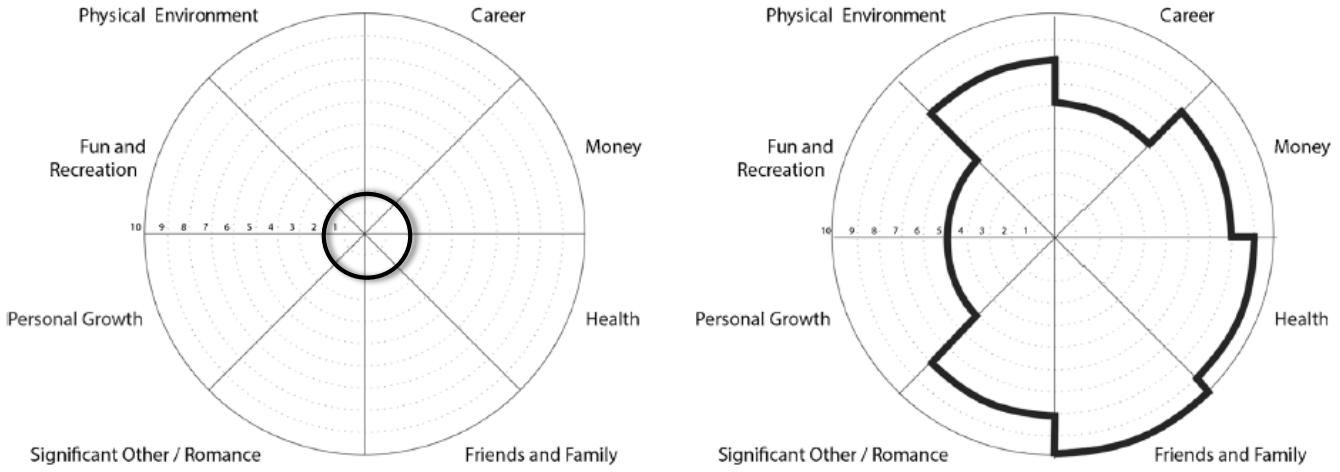
Gazelle, G., Liebschutz, J.M. & Riess, H. J GEN INTERN MED (2015) 30: 508. https://doi.org/10.1007/s11606-014-3144.

Instructions: The Wheel of Life is composed of eight domains that, together, represent one way of describing your life. Taking the centre of the blank wheel on the left as 0 and the outer edge as an ideal 10, rank your level of satisfaction with each life area by drawing a curved line to create a new outer edge. The new perimeter, seen on the right, represents your Wheel of Life. Let's look at those areas where you want to improve your level of satisfaction and think about what we might do to accomplish this.



Hoffman, Sharona, Healing the Healers: Legal Remedies for Physician Burnout (September 5, 2018). Yale Journal of Health Policy, Law, and Ethics (2019, Forthcoming); Case Legal Studies Research Paper No. 2018-10.

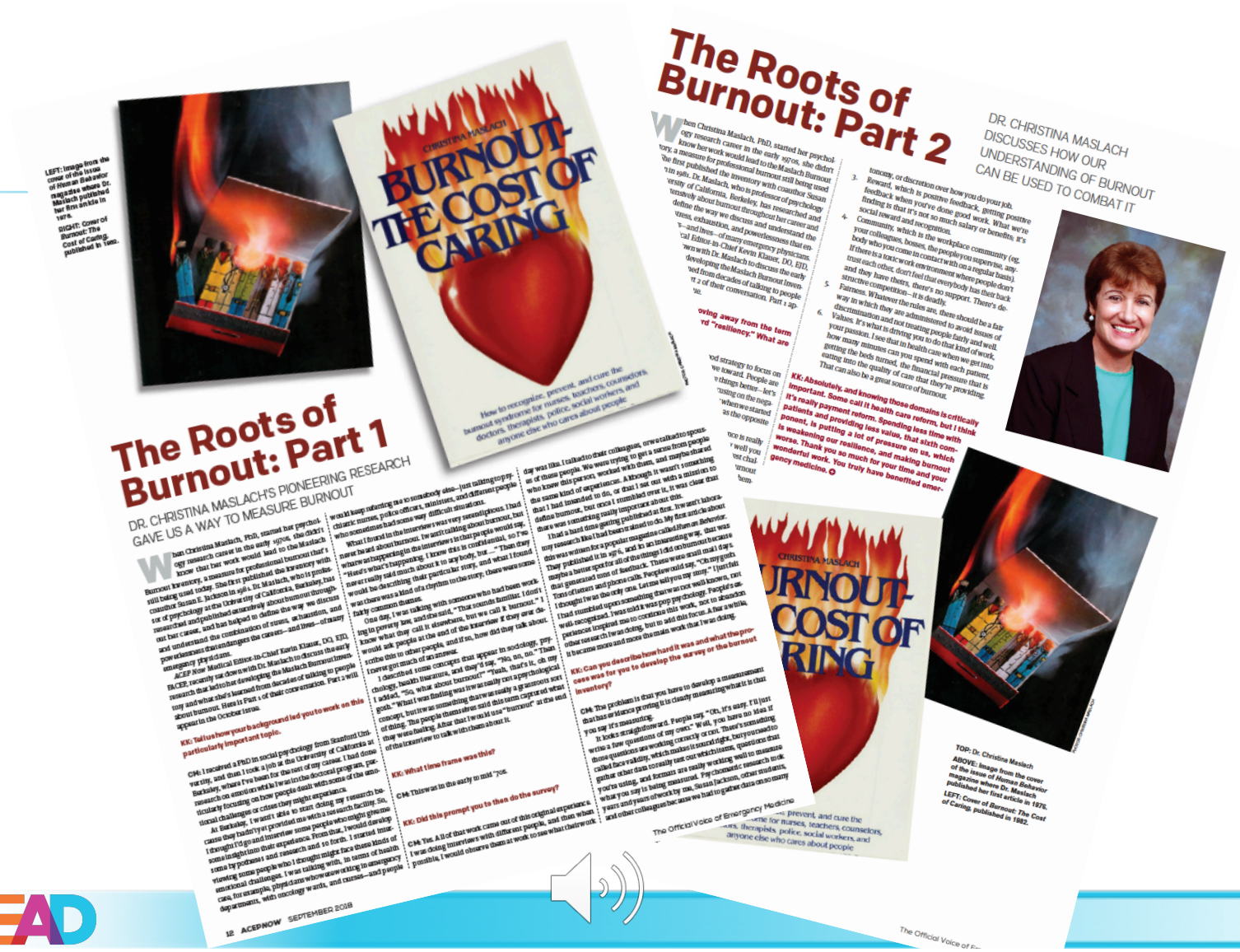
"First, health care regulations relating to health information technology, insurance, and many other matters are partly responsible for physician burnout and must be streamlined."

"Second, the government traditionally oversees and protects the health and well-being of the American workforce."

These tools, resources address physician burnout at systems level. American Medical Association; January 8, 2018.

These other systems-based approaches to reducing burnout were recommended:

- Implement a team-based model of care.
- Enhance communication based on team huddles/co-location.
- Develop clinician "float pools" for life events.
- Ensure that metrics for success include clinician satisfaction and well-being.
- Develop schedules with flexibility and clinician control.
- Develop a wellness committee and infrastructure.



LEFT: Image from the cover of the issue of *Human Behavior* magazine where Dr. Maslach published her first article in 1976.

RIGHT: Cover of *Burnout: The Cost of Caring*, published in 1982.

TOP: Dr. Christina Maslach

ABOVE: Image from the cover of the issue of *Human Behavior* magazine where Dr. Maslach published her first article in 1976.

LEFT: Cover of *Burnout: The Cost of Caring*, published in 1982.

Discussion