

Physician Burnout in America: A Roadmap for Restoring Joy and Purpose to Medicine

Physician Burnout in America: A Roadmap for Restoring Joy and Purpose to Medicine

In November 2015, 30 people gathered at **The Johnson Foundation's Wingspread Center** with one goal: To explore, discuss, and refine ideas and solutions for stemming the tide of healthcare provider burnout and its impact on caregivers and their patients.

This is the first in a series of retreats and discussions designed to delve into caregiver burnout throughout the healthcare team. This brainstorming retreat and companion report focused on the problem of physician burnout. Future endeavors will address the challenges facing nurses and other healthcare providers. Ultimately, we hope our efforts will spur public conversation about the impact of caregiver burnout that can lead to solutions that will increase caregiver joy across the healthcare delivery team and improve the patient experience.

The need is critical. The Affordable Care Act is increasing access to health care. Baby boomers are becoming seniors at a rate of 10,000 per day.¹ At the same time, the physician workforce is decreasing. Consider these statistics:

- 30 percent of primary care physicians ages 35-49 expect to leave the industry
- 73 percent of physicians would not recommend the profession to their children
- Physicians are more likely than the general population to commit suicide²

Stress is not new to health care. Physicians 50 years ago also faced stress. However, today half of doctors, nurses and healthcare administrators say they are burned out. What's changed? The entire world of health care, from the way records are kept to the way payments are structured. All of it impacts the caregiver and patient experience.

The resulting burnout raises the specter of a physician shortage in coming years. Equally scary, it means that half of the providers working today may be depressed, overwhelmed and exhausted—while still seeing patients.

This first gathering of deep thinkers included physicians, nurses, healthcare writers, health technology entrepreneurs, health system executives, hospital administrators, and resiliency and neurology experts. They represented rural, suburban, urban, and military health systems. They work in primary care, specialty health care, think tanks, nonprofits, and education systems.

¹ Pew Research, "Baby Boomers Retire," <u>http://www.pewresearch.org/daily-number/baby-boomers-retire</u>

² Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). *Am J Psychiatry.* 2004 Dec;161(12):2295-302.



The wide expanse of experiences, thoughts, ideas and recommendations expressed over the two days were captured by an award-winning journalist. Her report was posted on a shared online platform where a number of the Wingspread healers worked collaboratively to enhance and refine the results.

What follows is the final report. It includes 16 compelling ideas organized into five sections aimed at combating physician burnout. Each section includes a statement of the challenge we addressed, the highlights of our retreat conversations, and finally, our proposed solutions.

Restore Humanity to Health Care

The Challenge

The future will be one in which we transition to a model of care that is both illness-based and wellness-based. We will look at health care on a continuum for each person to promote healthy lives and healthy communities. This is a revolutionary perspective on health care, medicine, and teams. As part of that revolution, the delivery of care and the concept of team will expand and evolve in unforeseeable ways.

Thus, promoting adaptation, resilience, and compassion as we navigate these challenges is imperative. It will help prevent caregiver burnout while also ensuring that redesigned healthcare systems meet the needs of both physicians and patients.

Currently, competing demands for caregivers to see a certain number of patients in a day, keep up with technology, and meet record-keeping rules can interfere with the desire to build interpersonal relationships with patients and with fellow members of the healthcare delivery team. There is too little time and too little opportunity for developing those bonds. But these bonds are critical to ensure caregivers have the resilience to move past loss, improve care, and avoid burnout.

The Conversation

- That which gets measured gets fixed. Therefore it is imperative that organizations be encouraged to include caregiver satisfaction and burnout as a quality measure that is actively tracked and reported. The first year measurement would establish the baseline. Then physicians would be re-screened periodically. When a burnout problem is documented, the organization should take active steps to address the problem.
- Share best practices. Encourage organizations to partner with non-competing healthcare organizations in their respective regions to share what works to raise physician and staff satisfaction and prevent caregiver burnout.
- Make it safe for providers to admit they are burned out. Physicians tend to be overachievers and perfectionists. This mentality creates a culture in which it's not acceptable to ask for help. Changing that is a strong first step toward making it easier for caregivers to seek assistance without fear of retribution. Once caregivers have a safe place to share what they need to combat their own burnout, it can lead to solutions. In some cases, that can be a surprisingly simple solution. For example, a single parent might need an earlier shift so she can pick up her children from school.
- Empower caregivers to speak up when they believe patients are being poorly served. The demands for meeting patient quotas and reimbursement requirements detract from the time available for providing the compassionate care that physicians want to give. Physicians, nurses, and other members of the healthcare delivery team should be encouraged to speak up when productivity demands trump compassion. And they should be listened to when they do.

- **Train new leaders to lead.** Clinicians who are appointed to be department heads may be very experienced physicians, but they often need training to be the best leaders. That includes training in communication skills and training in how to create a culture of caring and kindness that is patient focused and emotionally intelligent. Physician leaders also need to learn how to be active business partners and how to be champions of change and collaboration in a rapidly evolving healthcare system.
- **Redefine healthcare teams.** Every person who interacts with a patient contributes to the experience, beginning with the check-in desk and continuing through the medical assistant, nurse, physician, pharmacist, physical therapist, and more. Every person in that process should be working together to give the best care to patients and all members of this healthcare team should be held accountable.
- **Remember that caregivers are people too.** Start the day with a team meeting during which the leader asks a simple question: "How is everyone doing today on a scale of 1-5?" Make it safe for team members to admit their vulnerabilities and step up to support one another. Team meetings help everyone connect as people, an important foundation for building their connection as a team.
- Work to increase trust between physicians and administrators. Personal outreach between physicians and administrators in one-on-one and small group meetings is imperative. Once the foundation is laid, less personal interactions can reinforce the connection. For example, regular weekly emails asking "What did you love and what did you loathe about last week?" or online platforms that give providers direct access to administrators, can build on that trust. In all cases, follow-up is paramount. Without that, trust will be undermined. For example, look at the task the physician loathes and see if there is a way to eliminate that from his or her job.
- Integrate the skill of appreciation into all of our work. This can take many forms, but it should be personal and sincere, such as a hand-written note.

- 1. **Create metrics for burnout and a plan for addressing it.** Once the metrics are determined, encourage organizations to measure their staff burnout levels regularly. Make the burnout results available publicly. That public disclosure will hold organizations accountable. Equally important, it will allow new graduates looking for a job to ask, "What is your provider satisfaction score?" As organizations compete for a limited supply of providers, they will be motivated to tackle the causes of caregiver burnout within their ranks and work to eradicate it.
- 2. **Redesign the physical environment.** This can take several forms, but should include eliminating separate break rooms. When doctors, nurses, and staff gather in the same place for a cup of coffee, it increases the chances they will get know one another on a personal level. When they share stories about their children or a planned vacation, it creates a personal bond that helps build their bond as a team.

- 3. **Use technology in a way that supports physician-patient interaction.** Ask patients to fill out pre-visit surveys to capture the background data that otherwise can take up so much of the patient-physician interaction. Harnessing technology to collect that information before the visit can facilitate interactive, nuanced dialogue during the critical visit time.
- 4. **Create renewal fellowship programs.** As physicians move through their careers, they may find themselves drawn to a niche within their specialty. A mini fellowship would allow them to dive deeply into that interest, renewing their enthusiasm and vigor for their practice, ultimately creating centers of excellence.
- 5. **Create a healthy practice climate for physicians.** This would include maximizing autonomy, improving leadership, and developing a culture and operating model that values trust, respect, and authentic and open communication. Consider instilling 360-degree evaluations or creating a compact that spells out expectations on both sides: Administrators would ask physicians what they need, physicians would provide input, and the request would be resolved. If the answer is "no," the rejection would come with an explanation. A healthy practice climate also would include services and programs that promote caregiver healing such as training physicians in the principles of resiliency, including:
 - I. Spiritual-know your purpose.
 - II. Mental-practice mindfulness and focus.
 - III. Emotional-practice patience and deliberate calm.
 - IV. Physical-eat well, exercise, get enough sleep.

Improve Medical Training

The Challenge

Medical school is a grueling experience that can leave students burned out before they get to residency.

A study published in *JAMA* found that "Depression is more common among medical students, residents, and physicians than in the general population, though estimates of its prevalence vary. About 14 percent of medical students have symptoms of moderate to severe depression.³ In addition, roughly 5 percent of the 505 students surveyed revealed that they had suicidal thoughts at some point during training."⁴

Even medical students who don't have depression could be suffering from burnout, a measure that includes depersonalization, emotional exhaustion, a feeling of professional inadequacy. According to a survey of about 2,500 students from seven U.S. medical schools, about 53 percent of students met those criteria. In addition, students with burnout are more likely to report having done something dishonest, like cheat, and are more likely to seriously consider dropping out.⁵

There's an impact on patient care, too. Several studies have shown that residents who report they are burned out also self-report suboptimal patient care and more medical errors than those who are not suffering from burnout.⁶

After a medical student moves on to residency, the demands escalate. As one participant noted, "People come into health care with the desire to be caring and thoughtful. That gets extinguished early in careers when they are told there are too many people to see and no time to be caring and thoughtful."

It is true that physicians who are called to the profession because they want to help people find little time or compassion for their patients after meeting the demands of record keeping, reimbursement requirements and technology challenges. Burdened by six-figure debt, those disillusioned physicians can find themselves trapped in a profession they no longer enjoy.

One step toward changing that is to reform the schooling itself. While it is critical that medical students learn to perform complex procedures, it also is important for them to learn how to relate to patients. Teaching medical students to be compassionate providers will go a long way toward ensuring that the reality of medical school is more in line with students' expectations.

³ Schwenk TL, Davis L, Wimsatt LA. Depression, stigma, and suicidal ideation in medical students. JAMA. 2010;304:1181-1190. <u>Abstract</u>

⁴ Dyrbye LN, Thomas MR, Massie FS, Power DV, Eacker A, Harper W, et al. Burnout and suicidal ideation among U.S. medical students. Ann Intern Med. 2008;149(5):334-41.

⁵ Dyrbye LN, Massie FS, Eacker A, Harper W, Power D, Durning SJ, et al. Relationship between burnout and professional conduct and attitudes among us medical students. *JAMA*. 2010;304(11):1173-1180.

⁶ Shanafelt TD, Bradley KA, Wipf JE, Back AL Ann Intern Med. 2002 March 5, 136(5):358-67. <u>http://www.ncbi.</u> <u>nlm.nih.gov/pmc/articles/PMC2931238/</u>

By lessening the risk that physicians will be burned out before they even finish their residency, we have the potential to change the future of medicine.

The Conversation

- Break down the silos of medical training. Providing quality health care requires a team that includes physicians, nurses, technicians, and staff. But members of that team are trained separately in programs that focus only on their individual part of the process. New approaches to training in a team—in simulation settings or in real life settings—will help each member of the team learn to work together more effectively.
- Redefine what it means to be a successful physician. A successful physician should be defined as one who has dedicated his or her life to service and preserving health, one who cares for him or herself as well as family, and one who treats patients with a kind heart. This will help determine that the right people are attracted to medical school and help focus them on the overarching purpose of medical training. This also will help medical school committee members ask the right questions when they are interviewing prospective students and it will help professors adjust their teaching to keep the humanity of medicine top of mind as they design courses and teach classes.
- Ask medical students: "What is your purpose?" Once medical students have identified their own purpose, keep it tangible by having them write it on a card and carry it with them. Having that reminder easily accessible when the job gets challenging can help students stay focused on what's really important. Remembering why you are doing something is key to being resilient in the face of challenges, and resilience is key to avoiding burnout.
- Create a system that identifies talent early. Once it is clear what makes a successful physician, it will be easier to identify future doctors while they are still in high school.

- 6. **Redesign the curriculum.** This would include three critical components:
 - I. Collaborate with other healthcare professions to create a team-based training program. Physicians will be expected to work as part of a healthcare delivery team once they graduate. Educating them as part of a healthcare team will lead to a more seamless transition from medical school to practice.
 - II. Design courses that put the patient-physician relationship at the center of medical training. This would make the patient-doctor relationship a key part of each step of medical training and allow medical students to unite their avocation with their vocation by connecting them early to patients in a meaningful way.



- III. Include training in how to recognize and address burnout and how to build optimism and compassion. Use simulation labs to let students practice interacting with patients on a personal, emotional level so they can get feedback from instructors, just as they would if they were simulating how to deliver a baby or perform a tracheotomy. The goal should be to equip students and residents early on with skills in mindfulness, communication, stress management, and brain training to increase resilience and empathy.
- 7. Set common accreditation requirements across all healthcare disciplines. This would ensure that students in medicine, nursing, and all health care fields acquire the same core knowledge, which is good for patients and gives the care team a mutual basis of understanding.
- 8. **Create a loan forgiveness program.** Physicians should not start their professional lives burdened by debt that increases their personal stress level and can truncate career options. With the growing demand for health care, create a way for doctors to work off some or all of their debt via community service medicine. (For more on this, see "Reform Health Care in Ways that Support Physicians and Patients" on page 12.)
- 9. **Foster collaboration among external forces.** Authorities such as the Center for Medicare and Medicaid Services, the Joint Commission, the federal government, the legal community, and specialty societies helped create the burnout. These organizations should be fully engaged in finding ways to counter it.

Engage Patients in the Process

The Challenge

When people engage with the healthcare system, they often are at their worst. They are in pain, afraid, and vulnerable. Chances are they have checked their symptoms online and/ or consulted with friends and believe they know what's wrong. Overall, it can lead to a complicated relationship with a physician.

The Conversation

- Create a safe place for patients. Teach caregivers the Platinum Rule: Treat patients as the patients want to be treated. That means listening attentively, respectively, and non-judgmentally.
- **Respect the patient's choices.** Encourage patients to share their health goals, then create a treatment plan that incorporates those goals. For example, a patient diagnosed with a terminal illness might choose to enjoy their last few months rather than continue to fight the disease.
- Voice the physician's expectations. Once a treatment plan is chosen, communicate effectively what the physician expects of the patient. "If we are going to make this work, here are the things you need to do."
- **Be forgiving.** Understand that patients may not always do what they should to take care of themselves—they don't take their medications as directed, they eat poorly, rarely exercise, and fail to return for follow-up care. Give them a second, third, and fourth chance to be a better partner in improving their own health without passing judgment based on the patient's lifestyle, socio-economic status, or other factors.

- 10. **Promote care models that engage patients as partners in their care.** This can take many forms, but above all should respect physicians' and patients' needs for more time together, more focus on one another, and more compassion overall.
- 11. **Change the way patient satisfaction is measured.** The current system is far too closely (and crudely) aligned with reimbursement. Instead, explore how to ensure the best measures for a total patient experience that also will help physicians understand their role in the process.
- 12. **Design new and real time feedback mechanisms to capture the voice of the patient and family.** Then use that information to improve the patient-physician relationship and to improve the responsiveness and adaptability of the healthcare system to each patient's specific needs and expectations.

Optimize Technology to Enhance the Physician-Patient Experience

The Challenge

Technology is a key player in health care. It facilitates billing, keeps patient records, and makes it easier to share information. But technology doesn't always work for the people it is supposed to serve. Physicians and patients alike are frustrated when the provider spends the bulk of a patient visit staring at a screen rather than looking into the patients' eyes. One participant likened a physician typing into the Electronic Medical Record while seeing a patient to texting while driving.

We could have spent the entire 2.5 days of our retreat discussing technology. We purposely limited the in-person conversation to ensure there would be time to cover a full range of issues. However, technology continues to be a source of physician frustration and burnout. Complicated systems that work poorly and don't always talk to one another mean that physicians spend many after-work hours updating charts—sometimes entering the same information in several different places—rather than resting, recharging, and reconnecting with their loved ones.

During our conversation, the need for changes to make technology serve providers was an accepted idea. There was additional conversation during our online collaboration. We expect this question will continue to be explored in conversations spurred by this report.

The Conversation

- Clinicians have become data entry specialists. Having someone other than a
 physician responsible for updating medical records and interacting with the computer
 means that physicians are freed up to do what they do best: focus on, interact with,
 and care for patients. Redesigning the work flow to ensure technology plays a key
 supporting role—rather than taking over center stage during patient visits—would allow
 all members of the healthcare team to work to their highest licensed level.
- EMR vendors contribute to the burnout due to lack of collaboration. Use a combination of sticks and carrots to convince vendors to allow providers and health care systems to open their platforms so they can be customized easily to meet local needs.

- 13. Find ways to support caregivers in meeting technical obligations without detracting from patient interaction. This can take many forms. Two ideas:
 - I. Appoint one member of the healthcare team whose sole job is to update medical records and interact with the computer. That would free up physicians and nurses to do what they do best: interact with patients. It would increase productivity because doctors who spend less time doing clerical work would have more time to see patients. And it would reduce burnout because physicians would be able to focus on the part of the job they love: healing. This can include such approaches as hiring medical scribes, aides, or other support staff.
 - II. Train physicians to interact with the technology in a way that does not disrupt interaction with the patient. That could include such things as showing a physician where to sit or consulting on the right place to put the computer in an exam room so the patient, rather than the computer, remains the focus of the visit.
- 14. **Partner with EMR vendors.** Encourage vendors to open their platforms to advance solutions that decrease burnout, optimize outcomes, and encourage more physician-patient interaction. Embedding IT specialists or consultants in the clinic setting on a regular basis would enable EMR vendors to realize daily challenges and mitigate them.

Reform Health Care in Ways that Support Physicians and Patients

The Challenge

In many communities, getting regular care is a challenge. Perhaps the patient has a very long drive to a provider. Or the patient cannot afford to pay for the care so he or she puts off seeking treatment. By the time those patients finally seek care, they are sicker and the care costs more than it would have if the problem had been treated earlier. That raises costs and burdens an already taxed system.

The Conversation

• Grow opportunities for more connected care that focuses on patients rather than reimbursement. Create caregiving jobs in underserved communities in a way that benefits physicians as well as patients. The communities would become healthier, which would reduce demand on the system overall. An engaged healthcare workforce would drive waste and abuse out of the system. The growth in community-based care would drive down healthcare costs by moving from a health care delivery model focused on treating disease to one focused on health and wellness.

- 15. **Build a vibrant HealthCorps.** Following the lead of successful programs such as City Year, Peace Corps, and AmeriCorps, HealthCorps would send caregivers, including residents and young physicians, into underserved communities. They would be on the front lines, providing early access to care, integrating behavioral health into primary care to keep area residents well, offering follow-up care, health interventions and health services, and advocating for community health needs. Physicians who join HealthCorps would be eligible for medical school loan forgiveness in return for a commitment to spend a requisite amount of time working in underserved communities.
- 16. **Engage insurance companies in reform.** Insurance executives have the political capital to effect change. Fixing the system—from helping doctors reduce their own debt to creating a community health system that arrests illness before it becomes acute—reduces costs for everyone, including private insurers and the largest insurer of all, the federal government, which runs Medicare, and the state governments that run Medicaid.

Conclusion

As America transitions from an illness-based model of care to a wellness-based model of care, the role of the physician and the concept of team will expand and evolve in unforeseeable ways. It is imperative that all healthcare systems adapt quickly to these seismic shifts. We must refashion the way physicians are educated to include a more humane approach to the patient-physician relationship. We must help physicians to be more resilient in the face of change, loss, and stress. We must harness the power of technology to support rather than burden the work of health care. We must engage all stakeholders—patients, providers, administrators, technology suppliers, regulators, and others—to work together toward a singular goal: to restore humanity to the practice of health care and make the patient and provider experience the best it can be.

This report is more than a roadmap for restoring joy and purpose to medicine. It is a call to action. We hope our ideas will launch a national conversation about the causes and cures for physician burnout.

Index of Recommendations

RESTORE HUMANITY TO HEALTH CARE

Proposed Solutions:

- 1. Create metrics for burnout and a plan for addressing it.
- 2. Redesign the physical environment.
- 3. Use technology in a way that supports physician-patient interaction.
- 4. Create renewal fellowship programs.
- 5. Create a healthy practice climate for physicians.

IMPROVE MEDICAL TRAINING

Proposed Solutions:

- 6. Redesign the curriculum to:
 - I. Collaborate with other healthcare professions to create a team-based training program.
 - II. Design courses that put the patient-physician relationship at the center of medical training.
 - III. Include training in how to recognize and address burnout and how to build optimism and compassion.
- 7. Set common accreditation requirements across all healthcare disciplines.
- 8. Create a loan forgiveness program.
- 9. Foster collaboration among external forces.

ENGAGE PATIENTS IN THE PROCESS

Proposed Solutions:

- 10. Promote care models that engage patients as partners in their care.
- 11. Change the way patient satisfaction is measured.
- 12. Design new and real time feedback mechanisms to capture the voice of the patient and family.

OPTIMIZE TECHNOLOGY TO ENHANCE THE PHYSICIAN-PATIENT EXPERIENCE Proposed Solutions:

- 13. Find ways to support caregivers in meeting technical obligations without detracting from patient interaction.
- 14. Partner with Electronic Medical Records vendors.

REFORM HEALTH CARE IN WAYS THAT SUPPORT PHYSICIANS AND PATIENTS Proposed Solutions:

- 15. Build a vibrant HealthCorps.
- 16. Engage insurance companies in reform.

About the Convenors

Sponsors of the first Healing Brings Me Joy retreat are:

- Ascension Health
- Mission Health
- Intermountain Healthcare
- The Institute for Healthcare Excellence
- Experience Innovation Network
- HopeLab
- NASCAR
- Vocera Communications. Inc.

The architects and conveners of this discussion were **Tom Cosgrove**, Founder of QPatient Insight, **M. Bridget Duffy, M.D.**, Co-Founder of Experience Innovation Network, and **William J. Maples, M.D.**, Executive Director of the Institute for Healthcare Excellence.

The retreat discussion was facilitated by **Dr. Carolyn J. Lukensmeyer**, executive director of the National Institute for Civil Discourse.

This report was written by **Cindy Richards**, a Chicago journalist who works with QPatient Insight.

List of Participants

Sandra Argenio	IHE Faculty Physician The Institute for Healthcare Excellence
Tami Berry	Chief Executive Officer Vital Works <u>www.vitalworks.us</u>
Theresa Brown	Nurse/Writer Palliative Home Care <u>TheresaBrownRN.com</u>
Tiffany Christensen	PFE Specialist North Carolina Quality Center NCHA
Steve Cole	Physician and Vice President Research & Development HopeLab www.hopelab.org
Diane Colgan	Chair-Elect Medical Staff Suburban Hospital/Johns Hopkins Medicine <u>dianecolganmd.com</u>
Tom Cosgrove	Founder Qpatient Insight <u>qpatientinsight.com</u>
Elizabeth Crane	Founder/Chief Vision Officer It's All Good Here www.itsallgoodhere.com
M. Bridget Duffy	Chief Medical Officer Vocera Communications Experience Innovation Network <u>www.vocera.com</u>

Jeffrey Haney	Program Director Designated Institutional Official Santa Rosa Family Medicine Residency Sutter Santa Rosa Regional Hospital
Kim Henrichsen	Vice President of Clinical Operations and Chief Nursing Officer Intermountain Healthcare
Donna Katen-Bahensky	Chief Executive Officer DKB Consulting
Steven Kern	Chief of Surgery Maple Grove Hospital
Eric Langshur	Chief Executive Officer Abundant Venture Partners AVIA
Margaret Laws	President & Chief Executive Officer HopeLab www.hopelab.org
Matt Luedke	Physician Essentia Health
Reggie Luedtke	Chief Executive Officer Branch2, Inc.
Carolyn Lukensmeyer	Executive Director National Institute for Civil Discourse
William Maples	Executive Director and Chief Medical Officer The Institute for Healthcare Excellence, Professional Research Consultants <u>www.HealthcareExcellence.org</u>
Beth Miller	Program Director Internal Medicine Seton/University of Texas Austin Dell Medical School

Tom Murphy	Physician Heal Thyself MD
James Oberman	Bureau of Medicine and Surgery Medical Corps Career Planner National Capital Region Course Director for PCCCI Otolaryngology Bureau of Medicine and Surgery Walter Reed National Military Medical Center Institute for Healthcare Excellence IHE Faculty
Ronald Paulus	President and Chief Executive Officer Mission Health System
Timothy Poulton	IHE Faculty Family Medicine Physician The Institute for Health Care Excellence Mission Health System
Anita Pramoda	Chief Executive Officer Owned Outcomes
Candace Quinn	Chief Operating Officer Professional Research Consultants, Inc. (PRC)
Cindy Richards	Journalist QPatient
Diane Shannon	Freelance Writer Shannon Healthcare Communications www.mdwriter.com
Marc Silver	Chief, Division of Medical Services Founder, Heart Failure Institute Department of Medicine Advocate Christ Medical Center University of Illinois at Chicago
Jason Wolf	President The Beryl Institute

Appendix

References on Physician Burnout

Dyrbye LN, Thomas MR, Massie FS, Power DV, Eacker A, Harper W, et al. Burnout and suicidal ideation among U.S. medical students. *Ann Intern Med.* 2008;149(5):334-41.

Dyrbye LN, Massie FS, Eacker A, Harper W, Power D, Durning SJ, et al. Relationship between burnout and professional conduct and attitudes among us medical students. *JAMA*. 2010;304(11):1173-1180.

Fahrenkopf AM, Sectish TC, Barger LK, Sharek PJ, Lewin D, Chiang VW, et al. Rates of medication errors among depressed and burnt out residents: prospective cohort study. *BM*7. 2008;336(7642):488-91.

Linzer M, Manwell LB, Williams ES, Bobula JA, Brown RL, Varkey AB, et al.; MEMO (Minimizing Error, Maximizing Outcome) Investigators. Working conditions in primary care: physician reactions and care quality. *Ann Intern Med.* 2009;151(1):28-36.Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu Rev Psychol.* 2001; 52:397-422.

Linzer M, Levine R, Meltzer D, Poplau S, Warde C, West CP. 10 bold steps to prevent burnout in general internal medicine. *J Gen Intern Med.* 2014;29(1):18-20.

Maslach C, Leiter MP. Early predictors of job burnout and engagement. J Appl Psychol. 2008;93(3):498-512.

Shanafelt TD, Boone S, Tan L, et al. Burnout and satisfaction with work–life balance among U.S. physicians relative to the general U.S. population. *Arch Intern Med.* 2012;172:1377–85.

Shanafelt TD, Kaups KL, Nelson H, Satele DV, Sloan JA, Oreskovich MR, et al. An interactive individualized intervention to promote behavioral change to increase personal well-being in US surgeons. *Ann Surg* 2014;259(1):82-8.

Shanafelt TD, Hasan O, Dyrbye LN, Sinsky C, Satele D, Sloan J, West CP. Changes in Burnout and Satisfaction With Work-Life Balance in Physicians and the General US Working Population Between 2011 and 2014. *Mayo Clin Proc.* 2015;90(12):1600-13.

Shanafelt TD, Balch CM, Bechamps G, Russell T, Dyrbye L, Satele D, et al. Burnout and medical errors among American surgeons. *Ann Surg.* 2010;251(6):995-1000.

Shanafelt TD, Bradley KA, Wipf JE, Back AL. Burnout and self-reported patient care in an internal medicine residency program. *Ann Intern Med.* 2002;136(5):358-67.

Shanafelt TD, West CP, Sloan JA, Novotny PJ, Poland GA, Menaker R, et al. Career fit and burnout among academic faculty. *Arch Intern Med.* 2009;169(10):990-5.

Schernhammer E. Taking their own lives -- the high rate of physician suicide. N Engl J Med. 2005;352(24):2473-6.

Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (metaanalysis). *Am J Psychiatry*: 2004 Dec;161(12):2295-302.

West CP, Huschka MM, Novotny PJ, Sloan JA, Kolars JC, Habermann TM, et al. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. *JAMA*. 2006;296(9):1071-8.

West CP, Dyrbye LN, Rabatin JT, Call TG, Davidson JH, Multari A, et al. Intervention to promote physician well-being, job satisfaction, and professionalism: a randomized clinical trial. *JAMA Intern Med.* 2014;174(4):527-33.



Conferences that Inspire Solutions

Sponsors of the first Healing Brings Me Joy retreat are:











