Improving physician resiliency



Foster stress hardiness and protect against physician burnout.



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How will this module help me increase resilience in my clinical practice?

- 1 Simple, evidence-based solutions to enhance your joy in your practice and mitigate stress
- 2 A list of resources to help you further develop resiliency



Increasing administrative responsibilities—due to regulatory pressures and evolving payment and care delivery models—reduce the amount of time physicians spend delivering direct patient care. Physicians often experience burnout caused by demanding workloads, nights on call and other common clinic stressors. Learning resiliency helps physicians have longer, more satisfying careers and reduces the risk of burnout. By promoting well-being and improving personal resiliency, physicians are also able to positively impact patients and the practice as a whole.

Improving physician resiliency

Release Date: June 2015 End Date: June 2016

Objectives

At the end of this activity, participants will be able to:

- 1. Identify tools and resources to increase resiliency
- 2. Assess personal and professional contributors to stress
- 3. Identify and prioritize values and sources of meaning in all aspects of life
- 4. Create a support group to increase resiliency in their practice

Target Audience

This activity is designed to meet the educational needs of practicing physicians.

Statement of Need

Physicians face many stressors throughout their careers. Some professional stressors are expected, such as intense training and exposure to tragic outcomes during medical practice. Others stressors are the result of the evolving practice environment, including implementation of electronic health records, increasing regulatory demands and evolving payment models. Both personal and professional stress can lead to burnout among physicians. Learning resiliency will help physicians develop skills to reconnect with the meaning of their work, mitigate stress and reduce the risk of burnout. Resiliency may also make it possible for physicians to have longer, more satisfying careers. Reducing or eliminating burnout can also have implications for the whole practice by improving patient safety, patient satisfaction and the overall practice environment. This module will help foster stress hardiness and hedge against burnout.

Statement of Competency

This activity is designed to address the following ABMS/ACGME competencies: practice-based learning and improvement, interpersonal and communications skills, professionalism, systems-based practice, interdisciplinary teamwork and quality improvement.

Accreditation Statement

The American Medical Association is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Credit Designation Statement

The American Medical Association designates this enduring material for a maximum of 0.5 *AMA PRA Category 1 Credit*TM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Claiming Your CME Credit

To claim AMA PRA Category 1 Credit™, you must 1) view the module content in its entirety; 2) successfully complete the quiz answering 4 out of 5 questions correctly and 3) complete the evaluation.

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About the Professional Satisfaction, Practice Sustainability Group

The AMA Professional Satisfaction and Practice Sustainability group has been tasked with developing and promoting innovative strategies that create sustainable practices. Leveraging findings from the 2013 AMA/RAND Health study, "Factors affecting physician professional satisfaction and their implications for patient care, health systems and health policy," and other research sources, the group developed a series of practice transformation strategies. Each has the potential to reduce or eliminate inefficiency in broader office-based physician practices and improve health outcomes, increase operational productivity and reduce health care costs.

Disclosure Statement

The content of this activity does not relate to any product of a commercial interest as defined by the ACGME; therefore, neither the planners nor the faculty have relevant financial relationships to disclose.

Media Types

This activity is available to learners through Internet and Print.

References

West CP, Huschka MM, Novotny PJ, et al. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. *JAMA*. 2006;296(9):1071-1078.

Lee YK, Lee CC, Chen CC, Wong CH, Su YC. High risk of 'failure' among emergency physicians compared with other specialists: a nationwide cohort study. *Emerg Med J.* 2013;30(8):620-622.

Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among American surgeons. *Ann Surg.* 2009;250(3):463-471.



Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: a consensus statement. *JAMA*. 2003;289(23):3161-3166.

West CP, Dyrbye LN, Satele DV, Sloan JA, Shanafelt TD. Concurrent validity of single item measures of emotional exhaustion and depersonalization in burnout assessment. *J Gen Intern Med.* 2012;27(11):1445-1452.

Dyrbye LN, Satele D, Sloan J, Shanafelt TD. Utility of a brief screening tool to identify physicians in distress. *J Gen Intern Med.* 2013;28(3):421-427.

O' Leary K, Dockray S. The effects of two novel gratitude and mindfulness interventions on well-being. *J Altern Complement Med*. 2015;21(4):243-245.

Goodman MJ, Schorling JB. A mindfulness course decreases burnout and improves well-being among healthcare providers. *Int J Psychiatry Med.* 2012;43(2):119–128.

Shapiro SL, Carlson LE. *The Art and Science of Mindfulness: Integrating Mindfulness into Psychology and the Helping Professions.* Washington, DC: American Psychological Association; 2009.

Krasner MS, Epstein RM, Beckman H, Suchman AL, Chapman B, Mooney CJ, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*. 2009;302(12):1284-1293.

Covey SR. *The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change.* New York, NY: Simon & Schuster; 2013.

Shanafelt TD. Enhancing meaning in work: a prescription for preventing physician burnout and promoting patient-centered care. *JAMA*. 2009;302(12):1338-1340. http://jama.jamanetwork.com/article.aspx?articleid=184612. Accessed March 5, 2015.

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):358-367.

Dyrbye LN, Power DV, Massie FS, et al. Factors associated with resilience to and recovery from burnout: a prospective, multi-institutional study of US medical students. *Med Educ.* 2010;44(10):1016-1026.

Dyrbye LN, Shanafelt TD, Balch CM, Satele D, Freischlag J. Physicians married or partnered to physicians: a comparative study in the American College of Surgeons. *J Am Coll Surg*. 2010;211(5):663-671.

Dyrbye LN, Varkey P, Boone SL, Satele DV, Sloan JA, Shanafelt TD. Physician satisfaction and burnout at different career stages. *Mayo Clin Proc.* 2013; 88(12):1358-1367.

Shanafelt TD, West CP, Sloan JA, et al. Career fit and burnout among academic faculty. *Arch Intern Med.* 2009;169(10):990-995.

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

Schernhammer E. Taking their own lives—the high rate of physician suicide. *N Engl J Med.* 2005;352(24):2473-2476.

Frank E, Dingle AD. Self-reported depression and suicide attempts among U.S. women physicians. *Am J Psychiatry*. 1999;156(12):1887-1894.

Shapiro J. When we err. CRICO/RMF Forum 26(1):20-21. https://www.rmf. harvard.edu/~/media/Files/_Global/KC/Forums/2008/forumJan2008. pdf. Published February 2008. Accessed March 5, 2015.

Allen D. Getting Things Done: The Art of Stress-Free Productivity. New York, NY: Penguin Books; 2002.

Finding meaning discussion groups for physicians, nurses and all other healthcare professionals. Institute for the Study of Health and Illness website. http://www.ishiprograms.org/programs/all-healthcare-professionals/. Accessed March 5, 2015.

Upcoming events for healthcare professionals. Center for Courage & Renewal website. http://www.couragerenewal.org/events/. Accessed March 5, 2015.

What is a Balint group? The American Balint Society website. http://americanbalintsociety.org/content.aspx?page_id=22&club_id=445043&module_id=123029. Accessed March 5, 2015.

The Center for Mind-Body Medicine website. http://cmbm.org/. Accessed March 5, 2015.

Faculty training in mind-body medicine. The Institute for Integrative Health website. http://tiih.org/what-we-do/train-professionals/mind-body-medicine/. Accessed March 5, 2015.

Mind -Body Skills Training for Resilience, Effectiveness, and Mindfulness (STREAM). The Ohio State University Wexler Medical Research website. https://mind-bodyhealth.osu.edu/. Accessed March 5, 2015.

Mindful Practice. University of Rochester Medical Center website. https://www.urmc.rochester.edu/family-medicine/mindful-practice.aspx?redir=www.mindfulpractice.urmc.edu. Accessed March 5, 2015.

Drummond D. Four tools for reducing burnout by finding work-life balance. Fam Pract Manag. 2016;23(1):28-33.



Introduction

What is resiliency in clinical practice?

Resiliency is the ability to adapt to and bounce back from the stress of the clinical environment. Physicians who are resilient are better equipped to handle the many challenges presented by patient care and therefore less likely to experience burnout. Promoting the well-being of physicians translates to benefits for patients and the practice as a whole.





What steps can I take to enhance my resiliency?

We all know that any change in behavior is hard. There are multiple small steps that you can take to help boost your personal resiliency.

These steps range from basics, such as ensuring adequate nutrition, sleep and exercise, to more deliberate reflective approaches, which include narrative practices, mindfulness practice, reconnection with purpose and meaning and peer group interaction.

What is resiliency?

Resiliency is the capacity to recover from difficulties, the ability to spring back into shape or the ability to withstand stress and catastrophe. Generally, resiliency improves with age as we are exposed to challenging situations and learn to solve problems. We can also deliberately enhance our resiliency by learning self-management skills and connecting with the meaning and purpose in our lives.

Learning physician resiliency has numerous benefits for you and your practice.



INDIVIDUAL BENEFITS

- Reduce burnout and identify signs of burnout early
- Increase compassion and empathy
- Reconnect with the joy and purpose of practice
- Improve physical and mental health



PRACTICE BENEFITS

- · Less staff turnover
- Reduce costs to recruit and replace burned out physicians
- Increase patient satisfaction
- · Fewer medical errors
- Improve work environment
- Less need for disciplinary action

STEPS

Action steps to managing physician stress

Start small. Choose one item from the steps below and spend the next 30 days checking in daily (even if only briefly) to measure your progress. If you don't feel like you're improving, be patient and reassess tomorrow. If you are making progress, give yourself a pat on the back and keep up the good work. Consider focusing on another item once the previous one is firmly in place.

- 1. Take a deep breath and get organized
- 2. Think about your practice from a different perspective
- 3. Think about the big picture
- 4. Find support and guidance in outside groups
- 5. Find meaning outside of work
- 6. Last but not least...don't forget to have fun



Take a deep breath and get organized



Put yourself on your own schedule

Schedule essential personal items before you schedule work items on your calendar. Your personal schedule may include the number of hours of sleep that are ideal for you, frequency and duration of exercise that you would like to get, downtime strictly for recreation, alone time and time for attention to nutrition. If you cannot do everything on your schedule, consider prioritizing your activities.



Why does my state of well-being matter?

There is evidence that stressed, burned-out physicians have:

- Lower patient satisfaction scores
- Higher rates of malpractice suits
- Higher likelihood of leaving the profession^{1,2,3}
- Tend to make more medical errors
- Are more likely to exhibit disruptive behavior³



Overall, physicians also have a higher risk of suicide than the general population despite similar risks of depression and anxiety.⁴ For male physicians, the risk of suicide is up to three times the risk of suicide for age-matched non-physician controls. For female physicians, this risk increases to five times that seen with age-matched controls.⁴

What risk factors are associated with burnout?

Common risk factors for burnout include:

- Demanding workloads
- Number of nights on call
- Having a partner who is also a physician
- Raising children
- Having recently made a medical error
- Being a mid-career practitioner
- Work-home conflict
- Spending less than 20 percent of time on the most meaningful aspects of your work

Take stock of your desires, feelings and actions that may be contributing to stress or burnout

Begin with an initial "moral inventory." Fearless moral inventory is a term used by Alcoholics Anonymous® that encourages you to take stock of your own role in any of the problematic areas of your life. This exercise is not intended to place blame or be used as an opportunity judge yourself but rather to examine how you may be contributing to your own stress.

With this inventory, you can begin to realize how these factors influence your happiness and well-being. Remember that personal resiliency is at the root of physician resiliency, and making the time to deal with personal issues and prioritize yourself will enable you to address workplace stressors as well.

This self-examination should focus on the role of your own emotions, thoughts or actions in perpetuating your feelings of stress or burnout. This is intended to help you find things that are within your power to change. You may choose to perform this evaluation each week, each month or on an annual basis.

For example, if you wish you had time to meditate but never seem to get around to it, examine the thoughts, emotions and actions that get in your way. You may find that sadness and feeling a lack of control (thoughts and emotions) lead to time spent surfing the internet (action) that takes up time you would otherwise use to meditate. Another example may be wishing that your child would tell you more about his/her life and finding that you spend very limited amounts of time (action) paying only partial attention (preoccupied with other thoughts) to what your child is saying, which may lead to less communication.



What are the common sources of physician stress in clinical practice?

Physicians are faced with numerous stressors throughout their careers. Some are expected, such as prolonged, intense training and exposure to tragic outcomes during medical practice. Others are the result of the evolving practice environment, including implementation of electronic medical records and increasing regulatory demands. Learning resiliency gives you the tools to not only appropriately react to these stressors, but helps you develop skills to prevent them from taking a toll on your personal well-being.



Even changes in your practice that are designed to improve your quality of life can be very stressful, especially those made without your input. It is useful to bolster your individual capacity to cope to make it easier for you to adapt to any changes made on a system-wide level. Learning and utilizing some techniques to foster your own stress tolerance and hedge against burnout will prove useful during times of rapid change.

What is physician burnout?

Physician burnout is defined by Shanafelt et al³ as "a syndrome encompassing three domains: depersonalization, emotional exhaustion and a sense of low personal accomplishment."

How can I tell if I am burned-out?

A useful self-assessment is to ask yourself: "How often have these statements felt true to me in the last year?"

- "I feel less enthusiastic about my work than before." (evidence of possible emotional exhaustion)
- "I have become more insensitive toward people since I took this job" or "I have become more callous over time in my current role." (evidence of possible depersonalization)

If your answer is "more than a few times a year" for either statement you are more likely to fall into the relevant sphere of burnout in a formal assessment. The third domain of burnout, low sense of personal accomplishment, is more difficult to measure and there is no single question that can give insight into this domain.⁵

Another option is to use the seven-item Physician Well Being Index developed by Dyrbye and colleagues. A score of greater than or equal to four positive answers on the Index correlates with lower mental quality of life, a lack of well-being and other markers of physician distress. The Index takes very little time to complete and the information obtained from answering the questions may be useful as a personal reference point.⁶

You may also consider using the validated mini-Z questionnaire on an organization-wide level to reliably measure staff burnout. The regular measurement and response to burnout should become an institutional best practice, a "vital sign" for organizations.

C

Identify and prioritize your values and compare them to how you spend your time

Start by making a list of the values you hold most dear. If you need to stimulate your thinking, sample lists of values can be easily found online. Ask what your priorities are at this stage of your life. The priorities will vary from person to person and from stage to stage in your career. For instance, at one point in your life the number one priority may be to get promoted and at another it may be to be the best parent possible. This is why this exercise is worth repeating regularly.

Once you have performed this assessment and have a list of core values and priorities, look at how you spend your time, attention and money. Is there a mismatch between your list and your spending? It is sometimes useful to look at how you spend every hour in your week and how you spend your income. If you value a life of human connection, family time and time outdoors but spend your days rushing from one patient to the next, getting home too late to talk to your partner and spend all weekend indoors, there





is a mismatch. Ask yourself if there are tasks you can outsource so that you have more time to focus on your values and priorities. Are there areas you would like to devote more time, attention or money to? Areas where you would like to devote fewer resources?.



Think about your practice from a different perspective

A

Write your individual mission statement

What do you stand for? Write it down. Each time you are considering doing something, ask yourself whether this action is consistent with your mission statement. This may help you decide whether to agree to do it or not. Many CEOs write their own personal mission statements to guide their decisions.

В

Write down inspiring patient stories

Regardless of whether you use a formal or personal approach, writing patient stories as narratives rather than for the medical record is a powerful way to connect with inevitable emotions stirred up by some patient contact. There are formal programs in narrative medicine, such as the one at Columbia University Medical Center. You may find it beneficial to write alone or with a group of peers. Of course, patients should never be named, nor should their stories be identifiable. Do not publish these stories in any form (such as in a magazine or on a blog) without explicit written consent from the patient. Seek legal advice if you wish to have your work read by a broader audience.



Think about the big picture

Α

Consider the legacy you want to leave behind

Deciding how you wish to be remembered may help spur changes in the way you currently live. An exercise described by Stephen R. Covey in his seminal work, *The 7 Habits of Highly Effective People*, is to imagine what a member of your family, a personal friend, a person from your work place and a person from the broader community may say about your life at your memorial service.¹¹

B

Start a gratitude journal

Write down three items that you are grateful for each day. Examples include seeing the sunrise, a warm smile from a patient, etc. Nothing is too simple for this exercise. Some people like to do this immediately before going to sleep at night; others prefer first thing in the morning. This easy practice has been shown to increase self-reported happiness and prevent burnout.⁷

C

Learn to manage your time and finances

Physicians have extensive training in the practice of medicine but often have very little training in managing their own time and finances. It may be worth a course or a consultation with a reliable expert to help hone your skills in these areas. Two of the most popular and reliable time management approaches are the "Getting Things Done" approach by David Allen and the FranklinCovey method. If financial management is a stressor, make an appointment to meet with a local financial advisor.

D

Develop your spiritual practice

Having a spiritual practice appears to be protective against burnout. Spiritual practices are not always a formal religious practice. For example, you may find that regular time alone in nature serves this purpose.



Find support and guidance in outside groups

A

Consider a support group

Many types of group interaction can be beneficial in reducing stress, restoring emotional well-being and preventing burnout. The general idea is for a group of peers to speak together about the stresses and pleasures of their work. These groups may be peer-led or moderated by a trained facilitator. Examples of groups you may consider include: Balint groups, mind-body medicine groups or faculty training, Finding Meaning in Medicine groups and Parker Palmer courage and renewal groups. If none of the groups listed here are available in your area consider attending training to start your own.

В

Enlist your peers to provide support

Healthcare providers are frequently exposed to extremely unsettling events (such as the death of a child) and may be involved in adverse outcomes. To help providers cope with these situations, Dr. Jo Shapiro of Brigham and Women's Hospital in Boston initiated a peer support program for her colleagues. This program consists of a group of physicians trained to provide a sympathetic ear to their distressed colleagues.

In the event of an adverse outcome or medical error, peers in the Brigham and Women's Hospital group are available to lend support and direct colleagues to additional resources. This program has helped to transform the culture of secrecy and shame associated with adverse outcomes and provides resources to affected physicians. Other institutions, such as The University of Washington School of Medicine and University of Virginia Health System, have recognized the value of peer support and are creating their own programs. Some major insurers, such as Physicians Insurance, are also developing similar programs to give litigation support.



Where in the healthcare ecosystem should burnout be addressed?

Burnout can be addressed at multiple levels:

- Individual (addressed in this module)
- Microsystem (e.g., the office practice) which is addressed in several STEPS Forward™ modules on various aspects of workflow and teamwork
- Mesosystem (e.g., the organization or institution)
- Macrosystem (e.g., health care system which is addressed through policy, regulation, research and technology)

The AMA is working at all four of these levels. This toolkit is focused primarily at the individual level. To learn more about burnout, see the STEPS Forward™ physician burnout module.



C

Seek professional help

Are you one of the many physicians who does not have their own primary care doctor? If you are concerned about your physical health, find or check in with a primary care doctor. For emotional support and help determining whether any serious mental health issues are present, consider a counselor such as a social worker, psychologist or psychiatrist.

D

Connect with local resources

Your institution may have an employee assistance program that provides free counseling and referrals. You may also explore wellness offerings from your county or state medical society. In addition, most states have a physician health program (PHP). In some states, the PHP is small and primarily handles substance abuse or disruptive behavior by physicians. In other states, offerings include wellness activities, such as sponsored mindfulness training.



Find meaning outside of work

A

Volunteer

Although it seems counterintuitive to add more to your packed schedule, people who donate their time and expertise in volunteer service often find it easier to attain personal happiness.

В

Learn something new

In general, people who choose a career in medicine have a thirst for knowledge and intrinsic curiosity. After many years in practice the problems that were initially challenging may become routine and therefore less engaging. Consider quenching your thirst by signing up to learn something new. This does not have to be medically- or career-related.

C

Take a mindfulness class

Mindfulness-based stress reduction, or MBSR, is a program developed in 1979 by Jon Kabat-Zinn at the University of Massachusetts Medical School. This secular program is based on meditation, self- and body-awareness and communication skills. Initially used by patients with chronic diseases and chronic pain, the applications of this program continue to grow. The basic program is eight weeks long for approximately two hours per week. There are now offshoots for specific issues, such as eating disorders, relapse prevention for substance use, management of recurrent depression, etc. There is growing literature that mindfulness-based approaches are very useful in mitigating the stress experienced by healthcare providers. 8,9,10 In fact, some institutions now have courses specifically for healthcare providers. Both the University of Massachusetts and the University of California, Los Angeles have well-respected mindfulness training programs.

D

Connect with your body

Many physicians find time for regular exercise. However, some specific forms of exercise, such as yoga, tai chi and Qi gong, foster a strong mind-body connection.





Last but not least...don't forget to have fun

Whether you are passionate about gardening, dancing, watching reality TV or traveling, remember to schedule (and keep) time to enjoy yourself.

Conclusion

When you are focused on managing the stress of relentless change it is easy to lose sight of the joy, meaning and purpose of your profession. Taking small steps devoted to improving your own resiliency will help you have a longer, more satisfying career and reduce your risk of burnout. Improving your personal resiliency may also have a positive impact on your team, your family, and all the patients with whom you interact.





To demonstrate completion of this module and claim *AMA PRA Category 1 Credits*™, please visit:

www.stepsforward.org/PhysicianResiliency

Get implementation support

The AMA is committed to helping you implement the solutions presented in this module. If you would like to learn about available resources for implementing the strategies presented in this module, please call us at (800) 987-1106 or click here to send a message to StepsForward@ama-assn.org



References

- 1. West CP, Huschka MM, Novotny PJ, et al. Association of perceived medical errors with resident distress and empathy: a prospective longitudinal study. JAMA. 2006;296(9):1071-1078.
- 2. Lee YK, Lee CC, Chen CC, Wong CH, Su YC. High risk of 'failure' among emergency physicians compared with other specialists: a nationwide cohort study. *Emerg Med J.* 2013;30(8):620-622.
- 3. Shanafelt TD, Balch CM, Bechamps GJ, et al. Burnout and career satisfaction among American surgeons. Ann Surg. 2009;250(3):463-471.
- 4. Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: a consensus statement. JAMA. 2003;289(23):3161-3166.
- 5. West CP, Dyrbye LN, Satele DV, Sloan JA, Shanafelt TD. Concurrent validity of single-item measures of emotional exhaustion and depersonalization in burnout assessment. *J Gen Intern Med.* 2012;27(11):1445-1452.



- 6. Dyrbye LN, Satele D, Sloan J, Shanafelt TD. Utility of a brief screening tool to identify physicians in distress. J Gen Intern Med. 2013;28(3):421-427.
- 7. O' Leary K, Dockray S. The effects of two novel gratitude and mindfulness interventions on well-being. J Altern Complement Med. 2015;21(4):243-245.
- Goodman MJ, Schorling JB. A mindfulness course decreases burnout and improves well-being among healthcare providers. Int J Psychiatry Med. 2012;43(2):119–128.
- 9. Shapiro SL, Carlson LE. *The Art and Science of Mindfulness: Integrating Mindfulness into Psychology and the Helping Professions.* Washington, DC: American Psychological Association; 2009.
- 10. Krasner MS, Epstein RM, Beckman H, Suchman AL, Chapman B, Mooney CJ, et al. Association of an educational program in mindful communication with burnout, empathy, and attitudes among primary care physicians. *JAMA*. 2009;302(12):1284-1293.
- 11. Covey SR. The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change. New York, NY: Simon & Schuster; 2013.
- 12. Shanafelt TD. Enhancing meaning in work: a prescription for preventing physician burnout and promoting patient-centered care. *JAMA*. 2009;302(12):1338-1340. http://jama.jamanetwork.com/article.aspx?articleid=184612. Accessed March 5, 2015.
- 13. 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):358-367.
- 14. Dyrbye LN, Power DV, Massie FS, et al. Factors associated with resilience to and recovery from burnout: a prospective, multi-institutional study of US medical students. *Med Educ*. 2010;44(10):1016-1026.
- 15. Dyrbye LN, Shanafelt TD, Balch CM, Satele D, Freischlag J. Physicians married or partnered to physicians: a comparative study in the American College of Surgeons. J Am Coll Surg. 2010;211(5):663-671.
- 16. Dyrbye LN, Varkey P, Boone SL, Satele DV, Sloan JA, Shanafelt TD. Physician satisfaction and burnout at different career stages. *Mayo Clin Proc.* 2013; 88(12):1358-1367.
- 17. Shanafelt TD, West CP, Sloan JA, et al. Career fit and burnout among academic faculty. Arch Intern Med. 2009;169(10):990-995.
- 18. Shanafelt TD, Balch CM, Bechamps G, et al. Burnout and medical errors among American surgeons. Ann Surg. 2010;251(6):995-1000.
- 19. Schernhammer E. Taking their own lives the high rate of physician suicide. N Engl J Med. 2005;352(24):2473-2476.
- 20. Frank E, Dingle AD. Self-reported depression and suicide attempts among U.S. women physicians. Am J Psychiatry. 1999;156(12):1887-1894.
- Shapiro J. When we err. CRICO/RMF Forum 26(1):20-21. https://www.rmf.harvard.edu/~/media/Files/_Global/KC/Forums/2008/forumJan2008.pdf. Published February 2008. Accessed March 5, 2015.
- 22. Allen D. Getting Things Done: The Art of Stress-Free Productivity. New York, NY: Penguin Books; 2002.
- 23. Finding meaning discussion groups for physicians, nurses and all other healthcare professionals. Institute for the Study of Health and Illness website. http://www.ishiprograms.org/programs/all-healthcare-professionals/. Accessed March 5, 2015.
- 24. Upcoming events for healthcare professionals. Center for Courage & Renewal website. http://www.couragerenewal.org/events/. Accessed March 5, 2015.
- 25. What is a Balint group? The American Balint Society website. http://americanbalintsociety.org/content.aspx?page_id=22&club_id=445043&module_id=123029. Accessed March 5, 2015.
- 26. The Center for Mind-Body Medicine website. http://cmbm.org/. Accessed March 5, 2015.
- Faculty training in mind-body medicine. The Institute for Integrative Health website. http://tiih.org/what-we-do/train-professionals/mind-body-medicine/. Accessed March 5, 2015.
- 28. Mind-Body Skills Training for Resilience, Effectiveness, and Mindfulness (STREAM). The Ohio State University Wexler Medical Research website. https://mind-bodyhealth.osu.edu/. Accessed March 5, 2015.
- 29. Mindful Practice. University of Rochester Medical Center website. https://www.urmc.rochester.edu/family-medicine/mindful-practice.aspx?redir=www.mindfulpractice.urmc.edu. Accessed March 5, 2015.
- 30. Drummond D. Four tools for reducing burnout by finding work-life balance. Fam Pract Manag. 2016;23(1):28-33.