The Physician's Physician

The Role of the Psychiatrist in Helping Other Physicians and Promoting Wellness

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KEYWORDS

• Physician well-being • Wellness • Burnout • Suicide • Depression
• Physician health • Physician well-being committee • Physician health program

KEY POINTS

- Psychiatrists are strategically positioned to serve as leaders in their organizations' efforts to address physician health, including being experts at treating medical colleagues in distress.
- Psychiatrists can serve in several leadership roles at their organizations, including chief wellness officer, chair of the physician well-being committee, and in the state's physician health program.
- Culture change is needed to preserve the health of physicians. It is important to recognize the importance of physician wellness and self-care and adopt the "Quadruple Aim," which includes provider well-being as a core component of the health care system's priorities.
- Psychiatrists need to lead by example in implementing and innovating best practices for supporting physician health in their own practices and by spreading this knowledge to their colleagues.

INTRODUCTION

A recent survey found that nearly two-thirds of US physicians report feeling burnt out, depressed, or both, and it is estimated that approximately 300 to 400 physicians commit suicide every year.[1–3] Although the US health care system and medical culture have always put the patient first, the well-being of physicians has been largely ignored. Although studies have shown that physicians adopt better health care and physical lifestyle practices compared with the general population (regular exercise, less smoking, and less obesity), physicians are also noted to have high rates of mental health concerns.[4,5] At a time when the US health care system faces a critical physician

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shortage, improving physician health can help to maximize workforce productivity, increase quality of care, and derive more value out of every health care dollar spent.[6,7]

Many positive efforts are already underway by organizations such as the American Medical Association, the American Psychiatric Association, and the Accreditation Council for Graduate Medical Education (ACGME). These include offering online modules, creating toolkits, and mandating resident training on physician well-being, respectively.[8–10] However, significant work remains to adequately address these issues and the medical culture at large. Although physicians receive specialized medical training, their knowledge and expertise does not necessarily enable them to maintain their own personal wellness or model best practices for themselves.

THE PHYSICIAN'S PHYSICIAN: A PSYCHIATRIST'S ROLE

Psychiatrists Have Unique Skills to Treat Physicians

Psychiatrists are in a unique position to serve as the "physician's physician." Most physicians receive very limited training in psychiatry and do not have the skills and knowledge to detect early signs of burnout, depression, addictions, and suicidality in their colleagues or in themselves. This lack of formal training and experience makes it hard for many physicians to take proactive steps to speak to a colleague in distress. Other common causes of delays in addressing colleagues are fear of professional repercussions, damaging relationships, and negatively affecting team dynamics.

Psychiatrists receive substantial training in these skills during residency and throughout their careers. This places psychiatrists in prime position to help their organizations raise awareness and develop effective prevention, detection, and management programs. Historically, psychiatrists have not been proactive enough in promoting the relevance of their skills to help their colleagues and organizations tackle this hidden epidemic.

Psychiatrists Are Well Trained to Treat Very Important Person Physician Patients

Physicians may be challenging to treat. Overidentification, intimidation, and politics can play a significant role in negatively influencing care for the impaired physician who will likely be treated as a VIP. This may lead to deviations from the standard of care that other patients would have received.[11] One of the most common problematic tendencies is for the VIP (physician patient) to influence or dictate their own treatment plans. This leads to a tendency to deviate from standard treatment approaches that the treating physician would have typically made due to fear of upsetting the VIP.[11,12] Excluding physical examinations, delaying drug screens, and ignoring the role of the primary care physician are some common examples of deviations from the standard of care when treating VIPs.

Physicians may also have difficulty being completely honest with their physician patient, resorting to appeasing, or unnecessarily supporting their VIP's demands. This can lead to inappropriate or suboptimal treatments, as both parties lose clinical objectivity. It may be more appropriate and helpful to think of the "VIP" acronym as "Very Influential Patient" or "Very Intimidating Patient" instead of "Very Important Person."[12] This may bring more conscious awareness to the psychosocial traps and biases that can affect even the most cognizant physician.

Another major concern is protecting the privacy of the physician patient. Physician patients will be sensitive to being seen by other staff and colleagues while seeking care, and it is not uncommon for appointments to be scheduled outside of regular clinic hours. Physician patients often prefer to be referred outside of their practice network and pay cash to avoid having their employer or insurer having any record

of their visits. Some physician patients also expect priority treatment such as being able to call their physician's cell phone directly.[11] It can be helpful to offer these, but it is critical to set clear limits.

Informal Consults: a Supportive Colleague Just One Phone Call Away

Within a health system or clinical network, psychiatrists can serve to help support and identify colleagues at risk for depression, burnout, and suicide. Physicians struggling with depression and burnout may try to hide their symptoms from colleagues for fear of professional repercussions, stigma, and judgment. Many will also be in self-denial and try to "power through" their struggle as other obstacles they have had to overcome in their life. Having a colleague who they can trust, talk to, and confide in can be one of the most effective first-line defenses. One of the most effective ways for organizations to identify struggling physicians is creating an informal referral network that includes a psychiatrist who is available to provide information and anonymous consultations.

BEST PRACTICES FOR ADDRESSING IMPAIRED PHYSICIANS AND PROMOTING WELLNESS

A large proportion of physicians report experiencing at least one symptom of burnout.[13] Many physicians have colleagues who are burnt out but are unaware of the fact and may hesitate to address such colleagues when they notice warning signs, because they receive little to no training on how to do so effectively. Having education on well-being for all physicians, and making self-care part of the culture of health care, are likely effective responses.

A Culture of Wellness as the First Defense

A clear message and acknowledgment of the impact of burnout from leadership such as the Chief Executive Officer and Chief Wellness Officer (CWO) are important first steps to promoting a culture of wellness across the organization, as long as this is done in a manner that does not blame physicians or make it seem that they are the problem. In reality, current evidence suggests that 80% of burnout is caused by administrative and systems issues, not by a lack of resilience from individual physicians. Creating open forums for staff to learn about wellness strategies and discuss burnout issues elevate the awareness of staff across the entire organization as a valuable first-line defense.[11] It is also important to create systems and processes such as anonymous hotlines, well-being committees, and reporting protocols that reduce the barrier to self-reporting or reporting a colleague (**Box 1**).

Addressing Impaired Physicians, Substance Abuse, and Addiction

Risk factors and warning signs for suicide are not different for physicians compared with the general public.[14] Educating staff on these warning signs is a critical first step to prevention, early identification, and management of burnt out physicians at risk for suicide.

It is important for colleagues to take immediate action if they notice changes in a colleague. Expressing concern for the individual, asking about their well-being, or suggesting that they speak to a mental health professional can be a critical first step to helping the individual.[11] Regularly reinforcing these points with the team at staff meetings, one-on-one sessions, and continuing medical education coursework can increase awareness and reduce the stigma that is one of the most common causes for delayed action by colleagues.

Box 1
Ten best practices for promoting wellness and addressing physician burnout

Leadership. Communicate a clear vision and plan for supporting wellness efforts. Acknowledge burnout issues and reinforce leadership's commitment to addressing them.

Well-Being Committee. Start a physician well-being committee and assign wellness champions across departments and employment levels.

Performance Metrics. Align staff performance metrics with wellness activities and objectives.

Quality Metrics. Incorporate wellness-oriented metrics as part of the organization's quality measures.

Annual Survey. Distribute an annual wellness survey to establish a concrete baseline and solicit feedback.

Interventions. Launch pilot programs based on feedback and ideas.

Data Collection. Use follow-up surveys and focus groups to measure progress and impact with quantitative and qualitative data.

Refinement. Use survey data and feedback to refine interventions and iterate on improvements. Scale successful interventions to increase impact and expand outreach.

Reinforcement. Meet regularly with leaders and staff to discuss progress, data, and interventions to promote wellness.

Systems. Establish processes to systematize key functions that reduce the barriers to getting help. Examples include anonymous self-reporting hotlines, processes for reporting colleagues, and well-being committees.

Data from American Medical Association (AMA), STEPS Forward™. Preventing Physician Burnout: improve patient satisfaction, quality outcomes and provider recruitment and retention; 2018; and Yellowlees PM. Physician suicide: cases and commentaries, 1st edition. Washington, DC: American Psychiatric Association Publishing; 2019.

It is vital to be educated on the difference between having a disorder, such as depression, and a disability or an impairment. The latter may cause work-related difficulties and require reporting through appropriate internal or external channels, potentially to a Physician Health Program, or occasionally directly to Medical Boards. Most physician patients with a psychiatric- or substance-related problem have an illness and are not impaired for work in any functional way, and they should be treated clinically and reassured that no reporting is necessary.

ORGANIZATIONAL LEADERSHIP ROLES FOR PSYCHIATRISTS TO CHAMPION PHYSICIAN WELL-BEING

Psychiatrists can play an instrumental role in driving a culture of physician well-being for their organizations. In 2017, the ACGME started requiring all accredited residency and fellowship programs "to address well-being more directly and comprehensively" (Section VI of Common Program Requirements).[10,15] This is an opportunity for psychiatrists to help craft policies, guidelines, and programs that fulfill these new requirements.

Psychiatrists can increasingly serve as valuable leaders and contributors to every organization by serving as CWO, chairing or being a member of a physician well-being committee, or working with a statewide physician health program (PHP). A description of each role is provided in more detail below summarizing key responsibilities, required skills, process for getting involved, and the kind of impact one can make in an organization by serving in such roles. These roles also offer opportunities for

professional development and career enrichment for psychiatrists looking to expand the scope of their practice, engage in physician leadership, and leverage their clinical expertise to shape policies at the local and national levels.

Chair or Member of Physician Well-Being Committee

Physician well-being committees involve volunteer physicians at a hospital or health system and fulfill the 2001 mandate from the Joint Commission that requires accredited health care organizations to implement "a process to identify and manage matters of individual health for licensed independent practitioners which is separate from actions taken for disciplinary purposes." This has tended to comprise a physician well-being committee.[16,17]

The functions and practices of physician well-being committees vary significantly. Most committees focus on identification, assessment, and referral of impaired physicians to the State PHP, which takes care of the monitoring and management of the physician until they are deemed safe to return to practice. Both systems are meant to be nonpunitive and offer a safe, recovery process that does not involve the State Medical Board or de-licensing.

Physician well-being committees are good career entry points for physicians interested in getting more involved in physician health issues. Psychiatrists are well-positioned to chair these committees, given their expertise in mental health. Serving on these committees can offer a unique perspective on addiction and mental health issues, because the committee sits at the intersection of clinical practice, policy, and institutional leadership and management.

Chief Wellness Officer

CWOs are new executive level positions that often set the long-term vision, strategy, and implementation of wellness for the organization. Among the 168 LCME-accredited medical schools and 400 major teaching hospitals in North America, as of November 2018, 18 had appointed CWOs, only 2 of whom were psychiatrists.

CWOs require many different skillsets, although the addition of strong clinical expertise in mental health would seem to be most useful, making psychiatrists well positioned to fill these roles. A CWO typically manages a multidisciplinary team that spans the entire organization, has experience setting long-term vision and strategies, as well as developing shorter-term goals focused on implementation of organizational changes and well-being initiatives. CWOs have the potential to impact an organization's culture, productivity, and success. Workforce training and retention can be one of the most significant drivers of cost for any organization. Lost productivity due to physician burnout and depression is costly, leading to decreased patient volume, increased stress on other physicians who need to cover, and negative impact on quality of care as a consequence. One study calculated that the US health system incurs $3.4 billion in annual costs due to physician burnout, and a study conducted at Stanford University estimated the annual cost to their health system to be in the range of $8 million to $28 million.[6,18,19] Therefore, supporting a culture where physicians and staff can find more fulfillment, meaning, and joy in their work every day can have a significant impact on the long-term success of an organization.

State Physician Health Programs

PHPs are nonpunitive and nondisciplinary state-run programs that help physicians address their addictions and mental health conditions, recover, and create a safe, structured, and accountable plan to return to practice.

PHPs are composed of a medical director and a few full-time or part-time staff who are often psychiatrists or addiction specialists, and they are employed by the state running the PHP. It is important to note that their services are not generally free and have to be paid by physicians using them. This can cause a professional dilemma for impaired physicians, because complying with the PHPs' program may be a requirement to avoid being reported to the state medical board while they recover. However, the PHPs offer a valuable service for recovering physicians, and follow-up studies have shown that up to 80% of physicians with substance use disorders, including psychiatrists, return to practice within 5 years.[20,21]

TRAINING AND ORGANIZATIONAL CAPACITY BUILDING

There are 3 major training requirements: first, the need for self-care for all physicians; second, educational programs for physicians who wish to treat other physicians; third, institutional and departmental promotion and education of a culture of wellness. With new requirements set by ACGME for integrating physician health education in all residency programs starting in 2017, a more streamlined curriculum to assist physicians with their own self-care would be valuable to provide a standardized baseline of knowledge and skills for all physicians.[15,22]

Training in self-care and well-being is likely to be most effective when it is incorporated throughout the course of the physician's training starting in medical school. Most medical schools have resources available, including wellness counselors and academic advisors. This presents a great opportunity for psychiatry to play a more integral role in the medical school curriculum and throughout the training pipeline from medical school, to residency, to clinical practice. A comprehensive curriculum for self-care and well-being would cover a range of topics including resilience, regular participation in process-oriented reflective small groups, mindfulness training, and interpersonal skills development (**Box 2**).

Box 2
Key elements of comprehensive curriculum on physician self-care and well-being

Small Groups. Regular participation in process-oriented reflective small groups.

Networking and Relationships. Teach ways to strengthen professional and social relationships and how to network widely and appropriately. Specific skill development in interpersonal professional relationships.

Simulations, Multimedia, and Experiential Training. Media training, combined with experiential training using multiple communications technologies with patients and colleagues.

Mentorship. Mentoring and mentee supervision opportunities throughout medical school and residency.

Self-Reflection. Content and discussion of personal identity development and transformation, the interaction between burnout and physician health, empathy, compassion, and how to become reflective practitioners.

Mindfulness and Resilience Training. Active participation and learning about resilience, mindfulness, exercise, nutrition, and relationships.

Psychiatry for Physicians. Content on the specific psychiatric, substance abuse, and personality disorders that affect physicians and how to recognize and treat them in any physician, including the individual themselves.

Leadership and Skills Training. Modules and discussion groups on leadership, financial, and business skills.

Systems Training. Learning about organizational systems and the interactions that occur within them and an understanding of institutional awareness and resources that can be used to change institutions.

Adapting to Practice Changes. Decision-making and clinical reasoning that takes into account future changes in medicine and technology such as the need for physicians to analyze large datasets and translate to patients.

Data from Yellowlees PM. Physician suicide: cases and commentaries, 1st edition. Washington, DC: American Psychiatric Association Publishing; 2019.

Psychiatrists serving in organizational leadership capacities are strategically positioned to advocate for more exposure to their specialty during the critical period where students are assessing their careers and residency options.

No formal training program exists outside of psychiatry residency for physicians to be trained to manage physician health issues. Many physicians gain experience and knowledge by serving on committees or by treating physicians as patients. Although receiving "on-the-job" training such as this can be effective, there is wide variation in exposure and experience, and specialist training programs in this area are sorely needed.

EMBRACING CULTURAL EVOLUTION

In 2014, the Institute for Healthcare Improvement revised their original Triple Aim framework to include "Joy in Work" to make it the "Quadruple Aim."[23,24] Physicians and physicians-in-training need to be empowered to protect their health and well-being just as much as they are taught to put the patient's needs first. They both do not need to be at odds if the culture and practices evolve to protect both patients and physicians.

"It is unprofessional not to look after yourself," is a message that is rarely taught and needs to be emphasized more in the future. We need to teach a broad scope of professionalism beyond attire, appearance, timeliness, and bedside manners. The Hippocratic Oath is full of values that protect the patient's rights, but there is no mention of how physicians need to treat themselves. Many medical schools have final year students modify this oath annually and it is to be hoped that such modifications will increasingly include the importance of self-care as a professional attribute.

Psychiatrists Leading Health Care's Workforce into the Future

The country's health care workforce is rapidly changing with a new generation of physicians entering clinical practice and the baby boomer generation of physicians set to retire. Technologies such as telemedicine and smartphones are enabling more flexible and mobile work arrangements. Psychiatrists can lead a process in adapting to these new changes and evolve their practices accordingly. Today's culture and work environments need to change rapidly to support the values and work-life equilibria sought by the Millennial generation. The changes in residency applications to various specialties are indicators of the shift in workforce preferences with increasing applications to "lifestyle" specialties such as dermatology and emergency medicine. Although Millennials are often described as "high maintenance" or "entitled," they are also known to prioritize family, friends, and hobbies, making them more resilient to burnout and better at self-care than previous generations.[11,25,26] Millennials are responding to the pressures of modern medicine more effectively than previous generations of physicians, and the medical culture will have to change to take into account the needs of this upcoming generation of physicians.

Technology also plays an undeniable role in physician burnout. Electronic medical records, increased administrative workloads, and increasing emphasis on laboratories, evidence, and data analysis will inevitably affect the way physicians practice medicine and how much joy and meaning they can find in their daily practice.[27,28] How will physicians increase meaning and joy through patient care while integrating more data and technology into their clinical workflows? These are the difficult questions that need to be studied to guide the profession toward a more fulfilling practice in the future. Innovations in telemedicine, smartphones, and web-based technologies create new opportunities for physicians to adopt a more hybrid approach to their practice that integrates virtual care more into their daily practice. Psychiatrists have opportunities to shape the future practice of medicine, using their understanding of cognition and mental processes to improve workflows by designing innovative user experiences and products.

LEADING BY EXAMPLE: MODELING SELF-CARE

It is important to remember that psychiatrists are also vulnerable to burnout and depression although rates are low compared with other specialties.[28] Although we focus on opportunities to lead and support physician health in communities, we must lead by example as individuals and as a specialty. During residency, psychiatrists learn the professional demands of clinical practice, and this is a critical time to teach best practices on wellness and self-care to all psychiatric residents. Psychiatrists' everyday actions and behaviors can have the most impact on their colleagues and health systems.

From a research perspective, psychiatrists have the opportunity to advance their understanding of physician health and well-being through research, advocacy, and clinical excellence. Very few studies have evaluated the design, implementation, and effectiveness of physician health programs such as physician well-being committees or state PHPs, and self-care education programs need to be evaluated as they are introduced. Data are critical to understand what is working and what is not working and for the community to share best practices that lead to measurable outcomes. The growing physician health problem opens the door for new research opportunities and advocacy efforts that are well-suited for psychiatrists to lead.

SUMMARY

Increasing interest in physician health and well-being offers a unique opportunity for psychiatrists to elevate their profession's visibility and affect the organizational and national levels. The country's health care spending is on an unsustainable trajectory, while the physician shortage problem will only get worse as more physicians retire. Lost productivity due to physician burnout, depression, and addiction is no longer just a physician wellness issue, but it has become a national policy issue. For the health care system to gain more value out of every health care dollar, maintaining a healthy, productive physician workforce is absolutely critical.

Despite organized efforts to tackle this problem as state PHPs and the Joint Commission's mandate of implementing physician well-being committees, the culture and everyday practice of medicine still lags behind. There is an opportunity for psychiatrists to serve in numerous roles to help drive cultural change and become leaders at the organizational, regional, and national levels. Designing and implementing effective physician well-being programs requires experienced mental health professionals to provide guidance and expertise to maximize returns on these investments, while improving patient care and physician well-being.

REFERENCES

1. Peckham C. Medscape national physician burnout & depression report 2018 2018. Medscape. Available at: https://www.medscape.com/slideshow/2018-lifestyle-burnout-depression-6009235. Accessed August 22, 2018.
2. Center C, Davis M, Detre T, et al. Confronting depression and suicide in physicians: a consensus statement. JAMA 2003;289(23):3161–6.
3. Association of American Medical Colleges. Applicants and matriculants data - FACTS: applicants, matriculants, enrollment, graduates, MD/PhD, and residency applicants data - data and analysis - AAMC. Applicants and matriculants data. Available at: https://www.aamc.org/data/facts/applicantmatriculant/. Accessed August 23, 2018.
4. Helfand BKI, Mukamal KJ. Healthcare and lifestyle practices of healthcare workers: do healthcare workers practice what they preach? JAMA Intern Med 2013;173(3):242–4.
5. Compton MT, Frank E. Mental health concerns among Canadian physicians: results from the 2007-2008 Canadian Physician Health Study. ComprPsychiatry 2011;52(5):542–7.
6. Berg S. At Stanford, physician burnout costs at least $7.75 million a year. AMA Wire. 2017. Available at: https://wire.ama-assn.org/life-career/stanford-physician-burnout-costs-least-775-million-year. Accessed August 23, 2018.
7. Shanafelt T, Goh J, Sinsky C. The business case for investing in physician well-being. JAMA Intern Med 2017;177(12):1826–32.
8. Linzer M, Guzman-Corrales L, Poplau S. Preventing physician Burnout - STEPS forward.AMA | STEPS forward. Available at: https://www.stepsforward.org/modules/physician-burnout. Accessed August 23, 2018.
9. Goldman ML, Bernstein C, Chilton J, et al. Toolkit for well-being ambassadors: a manual - a guide for psychiatrists to improve physician well-being and reduce physician burnout at their institutions. 2017. Available at: https://www.psychiatry.org/psychiatrists/practice/well-being-and-burnout/well-being-resources. Accessed August 23, 2018.
10. Accreditation Council for Graduate Medical Education (ACGME). Improving physician well-being, restoring meaning in medicine. 2018. ACGME.Available at: https://www.acgme.org/What-We-Do/Initiatives/Physician-Well-Being. Accessed August 23, 2018.
11. Yellowlees PM. Physician suicide: cases and commentaries. 1st edition. Washington, DC: American Psychiatric Association Publishing; 2019.
12. Alfandre D, Clever S, Farber NJ, et al. Caring for 'very important patients'–ethical dilemmas and suggestions for practical management. Am J Med 2016;129(2):143–7.
13. Shanafelt TD, Hasan O, Dyrbye LN, et al. Changes in Burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. MayoClin Proc 2015;90(12):1600–13.
14. Preventing physician distress and suicide. Available at: https://edhub.ama-assn.org/steps-forward/module/2702599. Accessed December 28, 2018.
15. Accreditation Council for Graduate Medical Education (ACGME). ACGME common program requirements section VI with background and intent 2017. Available at: https://www.acgme.org/What-We-Do/Accreditation/Common-Program-Requirements. Accessed August 23, 2018.
16. CMA Legal Counsel and California Public, Protection and Physician Health. 5177 guidelines for physician well-being committees policies and procedures 2013.

Available at: https://www.csam-asam.org/sites/default/files/5177_oncall.pdf. Accessed August 8, 2013.
17. Joint commission requirement - MS.11.01.01. Available at: http://www.massmed.org/Physician_Health_Services/Joint_Commission/Joint_Commission_Requirement_-_MS_11_01_01/#.W375GugzpEY. Accessed August 23, 2018.
18. Goh J, Shasha Han MS, Shanafelt TD, et al. An economic evaluation of the cost of physician burnout in the United States. In: Abstract book. 2017. p. 102. San Francisco (CA): American Conference on Physician Health (ACPH); 2017. Available at: https://med.stanford.edu/content/dam/sm/CME/documents/brochures/2017/ACPH-Abstract-Book-FULL.pdf.
19. Hamidi MS, Bohman B, Sandborg C, et al. The economic cost of physician turnover attributable to burnout. In: Abstract book. 2017. p. 35. San Francisco (CA): American Conference on Physician Health (ACPH); 2017.
20. DuPont RL, McLellan AT, Carr G, et al. How are addicted physicians treated? A national survey of Physician Health Programs. J SubstAbuse Treat 2009; 37(1):1–7.
21. Yellowlees PM, Campbell MD, Rose JS, et al. Psychiatrists with substance use disorders: positive treatment outcomes from physician health programs. Psychiatr Serv 2014;65(12):1492–5.
22. White S. ACGME launches resources webpage for resident and faculty well-being. The DO 2018. Available at: https://thedo.osteopathic.org/2018/03/acgme-launches-resources-webpage-resident-faculty-well/. Accessed August 23, 2018.
23. Bodenheimer T, Sinsky C. From triple to quadruple aim: care of the patient requires care of the provider. Ann Fam Med 2014;12(6):573–6.
24. Feeley D. The triple aim or the quadruple aim? Four points to help set your strategy. IHIImprov Blog. 2017. Available at: http://www.ihi.org/communities/blogs/the-triple-aim-or-the-quadruple-aim-four-points-to-help-set-your-strategy. Accessed August 23, 2018.
25. Landrum S. Millennials to be the most high-maintenance in the workplace. Forbes 2018. Available at: https://www.forbes.com/sites/sarahlandrum/2018/01/12/millennials-to-be-the-most-high-maintenance-in-the-workplace/. Accessed August 23, 2018.
26. Hershatter A, Epstein M. Millennials and the world of work: an organization and management perspective. J Bus Psychol 2010;25(2):211–23.
27. Sinsky C, Colligan L, Li L, et al. Allocation of physician time in ambulatory practice: a time and motion study in 4 specialties. Ann Intern Med 2016;165(11): 753–60.
28. Arndt BG, Beasley JW, Watkinson MD, et al. Tethered to the EHR: primary care physician workload assessment using EHRevent log data and time-motion observations. Ann Fam Med 2017;15(5):419–26.