



Clinical Faceoff

Clinical Faceoff: Physician Burnout—Fact, Fantasy, or the Fourth Component of the Triple Aim?

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One of the buzzwords frequently mentioned in discussions on healthcare transformation is the “triple aim.” The triple aim suggests a redesign of delivery systems so as to: (1) Improve patient outcomes, (2) increase patient satisfaction, and (3) decrease overall

cost. Whether we can or will achieve the triple aim is a topic for another day; rather, here, I would like to add a fourth component to the triple aim: Provider well-being.

As the delivery system continues to change, how can we ensure the deliverers themselves remain mindful of their own physical, emotional, and professional health? This consideration has been lost in many of the discussions pertaining to healthcare transformation. Often, the improvement plans and transformational activities focus merely upon system improvement. This is necessary but insufficient. In fact, the most crucial cog in the transforming machine is the practitioner, without whom the delivery of care is impossible.

Unfortunately, while consultants, efficiency experts, systems analysts, and software engineers have been feverishly working to improve efficiency, the effect of such efforts on the human beings charged with actually delivering this “enhanced” care has been largely ignored.

Is the electronic medical record optimized for our clinical practices? Do the increased reporting and documentation burdens imposed upon practitioners actually improve care? If the system is transforming for the better, why are we faced with an epidemic of early physician retirements, career changes, and burnout [10, 12, 17, 21, 22]?

Recognizing the importance of these issues, I have solicited the opinions of two experts in this field, Drs. Michael J. Goldberg and John D. Kelly, IV.

Dr. Goldberg, a Professor in Orthopaedics at the University of Washington School of Medicine, is also the Director of the Skeletal Health Program at Seattle Children’s Hospital. While recognized as a leader in the diagnosis and treatment of children with complex syndromes, birth defects, and skeletal dysplasia, his thought leadership in

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caregiver well-being is the expertise we will take advantage of here. He is the first Scholar-in-Residence at The Schwartz Center for Compassionate Healthcare in Boston, MA—a national nonprofit whose mission is to advance compassionate healthcare and provider well-being (www.theschwartzcenter.org).

Dr. Kelly is a Professor in the Department of Orthopedic Surgery and Director of the Sports/Shoulder Service at the University of Pennsylvania. He is a regular columnist in *Clinical Orthopaedics and Related Research*® on topics of mindfulness, physician well-being, and personal/professional growth and introspection. His thoughts on “Holistic Orthopedics,” and his columns on topics from Tolstoy to stress reduction are widely read because they provide a humanistic insight into medical and surgical practice.

Thomas K. Wuest MD, MMM: *How have you or any of your colleagues dealt with issues related to physician burnout?*

Michael J. Goldberg MD: As a first step, we have tried to have hospital leadership recognize that burnout is a mental state characterized by emotional exhaustion, depersonalization,

and a diminished sense of personal accomplishment. It is not whining by highly paid professionals, nor should it be stigmatized. Because burnout affects all caregivers—anyone who touches a patient—a successful program addressing workforce well-being must be comprehensive and organization-wide, similar to successful patient safety, continuous process improvement, and Lean Six Sigma initiatives.

We have proposed a program model to address the interrelationships between the individual provider, the unit/team, and organizational leadership. A brief sampling that we and others have employed include: (1) Programs that build individual resilience such as mindfulness, meditation, verbal and nonverbal communication skills, and attentive listening, (2) events that nourish caregiver-to-caregiver compassion by scheduling time for open and honest discussion of social and emotional issues that arise in caring for patients, and (3) organization-wide initiatives that support workforce well-being. These might include screening for workforce burnout, establishing policies for managing adverse events with an eye towards the second victim (the provider), and most importantly, support systems that preserve work control autonomy of physicians and nurses in clinical settings.

While many organizations have instituted portions of this model, the increasing epidemic of physician burnout [22] suggests that a piecemeal approach will not be successful. We believe that prioritizing compassion as a core tenet of care delivery and as a mechanism to mitigate physician burnout, will enable healthcare organizations to build a compassionate care anti-burnout toolbox of effective programs.

John D. Kelly, IV MD: Dr. Goldberg’s proposals such as burnout screening and resilience building are worthwhile. He is correct that a piecemeal approach to the rise in burnout will not work. The steps he delineates will surely lessen the emotional burden many physicians experience. But unless changes in culture and paradigm occur, improvements in physician wellness will be meager [11, 13].

A major shift in workplace culture, where providers are seen as human beings with real needs is paramount. Physicians cannot give what they don’t have, and their biopsychosocial and spiritual needs must be met in order for them to treat patients effectively. This cultural shift can only happen through responsible leadership. There must be buy-in from administration for meaningful change to materialize.

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A dramatic paradigm change in how physicians perceive patients is critical if we are to reverse the growing frequency of burnout. Patient encounters must be regarded as opportunities to extend compassion and heal, rather than a chore or a potential litigation source. When physicians can return to considering patient visits as opportunities to render help, increased fulfillment and joy will follow. This shift in perception can occur with training in compassionate care and a supportive and nurturing workplace setting.

There is a leadership vacuum in medicine. An enlightened chairman and/or administrator should recognize and prioritize physician wellness, because in the long-term, it is truly cost effective.

Dr. Wuest: *Dr. Goldberg, is there evidence to support the use of mindfulness, meditation, or similar techniques as an effective treatment/prevention measure to avoid burnout in the medical and surgical fields?*

Dr. Goldberg: Yes, there is evidence to support the use of these popular self-help techniques as part of comprehensive anti-burnout programs. High-quality evidence is sparse, but still supports effectiveness of these interventions. Systematic reviews and meta-analysis of studies involving

patients [8], and the general population [7], suggest that meditation programs can result in small to moderate reductions of negative dimensions of psychological stress. Similarly, systematic reviews of employees determined that mindfulness and meditation-based interventions were effective in improving workplace health and work performance; and such gains were maintained for up to 3 months [19]. However, if we consider physicians and surgeons, a systematic review of four studies of general practitioners [18] showed improved psychological well-being with cognitive behavioral and mindfulness techniques. In a recently published systematic review and meta-analysis of interventions to prevent and reduce physician burnout, West and colleagues [25] concluded that both individual-focused and structural or organizational interventions can reduce physician burnout. Although no specific physician burnout intervention has been shown to be better than other types of interventions, mindfulness, stress management, and small group discussions can be effective approaches to reduce burnout scores. It is likely, however, that both individual and organizational strategies in combination will be necessary.

It should be noted that strategies to build individual resilience, such as mindfulness and meditation, are easy

to teach, but place the burden for success on the individual. No amount of resilience can withstand a toxic or unsupportive environment [4]. Individual resilience is one piece of an organizational culture of compassionate care, but alone may be thought of as creating a stronger canary to send into a toxic coal mine [5].

Dr. Kelly: Dr. Goldberg is correct in that the support is sparse on the effectiveness of mindfulness-based programs in mitigating burnout. However, the preponderance of the studies show a positive effect on well-being [3, 9, 24]. Many stress-based techniques such as mindfulness, require months of practice in order to attain proficiency. Thus, studies looking at time-limited interventions, such as an 8-week course in meditation, are inherently flawed [23, 24]. As a practitioner of mindfulness for more than 5 years, my ability to live in the moment has grown with each successive year of practice.

I respectfully disagree with Dr. Goldberg's assertion that, "no amount of resilience can withstand a toxic or unsupportive workplace environment." A lack of support will increase stress; however, inner peace can be attained even in the most challenging environments. Techniques to sidestep negative energy such as cognitive restructuring, mindfulness, and

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compassion can keep one “centered” even in the midst of the most-turbulent of times.

Challenging times can be regarded as either a bellwether for future doom and gloom or opportunities for personal growth and transformation.

Dr. Wuest: *Now let’s turn our attention to something that may seem obvious in this context, but perhaps has been largely unaddressed. Dr. Kelly, the performance requirements and the competitive nature of the application process and matriculation into medical schools and residencies would seem to be a “perfect storm” to develop burnout. Does this make the medical profession more susceptible to such an (inevitable) outcome?*

Dr. Kelly: The reasons to enter a vocation in medicine vary, but there are a number of applicants who seek a career in healing as a means to heal themselves of old psychological wounds [6]. Many applicants have endured great adversity during their youth and have developed a rich sense of compassion for the pain of others. While compassion and empathy are noble virtues, the emotional “woundedness” that cultivated in these individuals may prompt the applicant to engage in compulsive overwork and lose a sense of reasonable personal boundaries.

In addition, obsessive, Type-A personalities who demand perfection are common among premedical students and propel them to work extraordinary hours and violate any semblance of a balanced lifestyle. These same personality traits place the applicant at risk for future episodes of depression, anxiety, and a general sense of loss of fulfillment [16].

Dr. Goldberg: As a rule, students enter medical school altruistic and idealistic, excited about becoming a doctor, empathic and eager to care for their future patients [20]. What follows is a decline in compassion, a crucial ingredient to mitigate burnout. Their curriculum focuses on emotional detachment and affective distancing for the purpose of clinical neutrality. Furthermore, when it comes to role-modeling, a disturbing finding surfaced in a nationwide survey completed this year by the Association of American Medical Colleges [2]. One in five medical school graduates responding to the survey stated that they experienced disconnects between what they were taught about professional behaviors/attitudes, and what they saw demonstrated by their faculty [2]. Empathy is further eroded as residents experience “time-constrained” patient interactions in the clinic, the emergency department, and the operating room. They often work with frustrated

and overwhelmed faculty members who are experiencing increased pressure to generate greater clinical revenue and struggle with nonintuitive electronic systems. This milieu breeds burnout. I would suggest that both medical school curricula and graduate medical education programs promote skills and behaviors that strengthen compassionate interactions, and develop clinical practice models that increase resident work control autonomy as ways to mitigate burnout.

Dr. Wuest: *Dr. Kelly, have you seen any progress in changing this milieu? That is, there is a growing body of evidence that patient care is better delivered via a “team” versus an “individual” approach. Participants in a team-delivery system often report less susceptibility to fatigue, burnout, and loss of professional and personal well-being. Are there any developments within medical school and/or residency curricula of supporting team-based care and learning?*

Dr. Kelly: There is a growing movement in educational institutions to foster “team approaches” to patient care because they improve outcomes [14]. In fact, many orthopaedic departments are developing a musculoskeletal service-line approach, wherein patients’ perceived needs are met by a host of providers ranging

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from rheumatologists and musculoskeletal radiologists to orthopaedic surgeons. The electronic medical record has facilitated crosstalk between specialists, which should improve continuity of care. In addition, interdisciplinary conferences are becoming more commonplace, especially among orthopaedic specialists, rheumatologists, and imaging specialists.

The increased communion among subspecialties not only enhances patient care, but also diffuses responsibility and eases uncertainties about particularly challenging clinical scenarios. As the saying goes, “several heads are better than one.” Nothing buoys a physician’s spirits more than excellent outcomes.

Dr. Goldberg: The “team” approach has proven to deliver better outcomes in a variety of settings: Pediatric and adult primary care (Patient-centered medical homes), patient safety (Strategies and Tools to Enhance Performance and Patient Safety), reducing complications and costs (American Society of Anesthesiologists’ Perioperative Surgical Home [1]), and managing musculoskeletal disorders (service lines).

Most current clinical education and patient-care models, both in medical schools and hospitals, have been

structured around traditional medical and surgical departments. This paradigm overlooks the fact that patients do not “get sick” within traditional teaching disciplines, but do so across widely varied medical and surgical specialties. Fundamental changes in organizational hierarchy that mirror and support team based care and learning are needed. The “team” must include more than physicians and nurse clinicians. Its composition should consist of all “caregivers,” that is, everyone who touches the patient (technologists, interpreters, pharmacists, transport workers, support staff, and administrators). Institutional- and system-wide programs and metrics that recognize and support teams and nourish workforce well-being are essential. The experience of the caregiver drives the experience of the patient. Curricula that integrate compassionate, collaborative care into health professional education should be the foundation of such training. Lown and colleagues [15] detail just how that can be done: They emphasize that compassion without collaboration may result in uncoordinated care, while collaboration without compassion may result in technically correct but depersonalized care that fails to meet the unique emotional and psychosocial needs of everyone involved.

References

1. American Society of Anesthesiologists. Perioperative surgical home. Available at: <https://www.asahq.org/psh>. Accessed November 23, 2016.
2. Association of American Medical Colleges. Medical school graduation questionnaire. Available at: <https://www.aamc.org/download/464412/data/2016gqallschoolssummaryreport.pdf>. Accessed November 15, 2016.
3. Carmody J, Baer RA. Relationships between mindfulness practice and levels of mindfulness, medical and psychological symptoms and well-being in a mindfulness-based stress reduction program. *J Behav Med.* 2008; 31:23–33.
4. de Zulueta PC. Developing compassionate leadership in health care: An integrative review. *J Healthc Leadersh.* 2016;8:1–10.
5. Drummond D. Physician resilience – A stronger canary is never enough. Available at: <https://www.thehappy.md.com/blog/physician-resilience-a-stronger-canary-is-never-enough>. Accessed November 23, 2016.
6. Eagle PF, Marcos LR. Factors in medical students’ choice of psychiatry. *Am J Psychiatry.* 1980;137: 423–427.
7. Galante J, Galante I, Bekkers MJ, Gallacher J. Effect of kindness-based meditation on health and well-being: A systematic review and meta-analysis. *J Consult Clin Psychol.* 2014;82:1101–1114.

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25. Goyal M, Singh S, Sibinga EM, Gould NF, Rowland-Seymour A, Sharma R, Berger Z, Sleicher D, Maron DD, Shihab HM, Ranasinghe PD, Linn S, Saha S, Bass EB, Haythornthwaite JA. Meditation programs for psychological stress and well-being: A systematic review and meta-analysis. *JAMA Intern Med.* 2014;174:357–368.
9. Grossman P, Niemann L, Schmidt S, Walach H. Mindfulness-based stress reduction and health benefits: A meta-analysis. *J Psychosom Res.* 2004;57:35–43.
10. Gurely RJ. Whether retiring or fleeing, doctors are leaving health care. Available at: <http://www.centerforhealthjournalism.org/2014/03/10/whether-it-s-retire-or-flee-doctors-are-leaving-health-care>. Accessed November 23, 2016.
11. Kavanagh MH, Ashkanasy NM. The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *BJM.* 2006;17:S81–S103.
12. Krauthammer C. Why doctors quit. Available at: https://www.washingtonpost.com/opinions/why-doctors-quit/2015/05/28/1e9d8e6e-056f-11e5-a428-c984eb077d4e_story.html?utm_term=.110824639140. Accessed November 24, 2016.
13. Kuhn TS. *The Structure of Scientific Revolutions*. Chicago, IL: University of Chicago Press; 2012.
14. Lemieux-Charles, Louise, McGuire WL. What do we know about health care team effectiveness? A review of the literature. *Med Care Res Rev.* 2006;63:263–300.
15. Lown BA, McIntosh S, Gaines ME, McGuinn K, Hatem DS. Integrating compassionate, collaborative care (the Triple “C”) into health professional education to advance the triple aim of health care. *Acad Med.* 2016;91:1–7.
16. McManus IC, Keeling A, Paice E. Stress, burnout and doctors’ attitudes to work are determined by personality and learning style: A twelve year longitudinal study of UK medical graduates. *BMC Med.* 2004;2:29.
17. Miller P. Why doctors quit: The pundits weigh in. Available at: <http://www.merrihawkins.com/candidates/BlogPostDetail.aspx?PostId=40242>. Accessed November 23, 2016.
18. Murray M, Murray L, Donnelly M. Systematic review of interventions to improve the psychological well-being of general practitioners. *BMC Fam Pract.* 2016;17:36.
19. Ravalier JM, Wegrzynek P, Lawton S. Systematic review: Complementary therapies and employee well-being. *Occup Med (Lond).* 2016;66:428–436.
20. Schwartzstein RM. Getting the right medical students-nature versus nurture. *N Eng J Med.* 2015;372:1586–1587.
21. Shanafelt TD, Boone S, Tan L, Dyrbye LN, Sotile W, Satele D, West CP, Sloan J, Oreskovich MR. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med.* 2012;172:1377–1385.
22. Shanafelt TD, Hasa 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 Clinic Proceedings.* 2015;90:1600–1613.
23. Shapiro SL, Astin JA, Bishop SR, Cordova M. Mindfulness-based stress reduction for health care professionals: results from a randomized trial. *Int J Stress Manag.* 2005;12:164–176.
24. Shapiro SL, Schwartz GE, Bonner G. Effects of mindfulness-based stress reduction on medical and premedical students. *J Behav Med.* 1998;21:581–599.
25. West CP, Dyrbye LN, Ewin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: A systematic review and meta-analysis. *Lancet*. [Published online ahead of print September 28, 2016]. DOI: [10.1016/S0140-6736\(16\)31279-X](https://doi.org/10.1016/S0140-6736(16)31279-X).