

Patient Safety Tip of the Week

October 16, 2018 Burnout

We just did a column on physician burnout and its impact on medical errors (see our August 2018 What's New in the Patient Safety World column "[Burnout and Medical Errors](#)"). We've also talked about nurse burnout in multiple columns on nurse workload and long nursing shifts. But since August there has been a deluge of publications on burnout, so here we go again.

Burnout, of course, occurs in all careers, not just healthcare ones. And we all know healthcare workers who show signs of burnout. But why are we talking about burnout in a patient safety column? The answer is simple: burnout affects patient care and patient safety.

That August 2018 What's New in the Patient Safety World column "[Burnout and Medical Errors](#)" highlighted a study ([Tawfik 2018](#)) which showed that physicians reporting symptoms of **burnout** were more than twice as likely to have reported a major medical error in the prior 3 months.

In addition to that study, there have been two recent systematic reviews and meta-analyses showing an association between physician burnout and patient safety issues. And physician burnout also made Becker's Hospital Review's "10 Top Patient Safety Issues for 2018" ([Vaidya 2018](#)).

The first systematic review ([Panagioti 2018](#)) analyzed 47 studies that met their inclusion criteria, accounting for over 42,000 physicians. Physician burnout was associated with an increased risk of patient safety incidents (OR, 1.96), poorer quality of care due to low professionalism (OR, 2.31), and reduced patient satisfaction (OR, 2.28). The links between burnout and low professionalism were larger in residents and early-career (≤ 5 years post residency) physicians compared with middle- and late-career physicians. Particularly in residents and early career physicians (≤ 5 years post residency), burnout was associated with close to four times increased risk for unprofessional behaviors. Overall, the depersonalization dimension had the most adverse association with quality and safety of patient care and patient satisfaction.

The second systematic review that focused on patient safety ([Mossburg 2018](#)) found that, of 22 studies meeting inclusion criteria, ten studies showed a relationship between both safety culture and clinical errors with burnout. Two of 3 studies reported an association between burnout and patient outcomes.

Remember also that the relationship between burnout and medical errors is bidirectional. Those physicians or nurses who have been involved in a serious incident, the "second

victims”, are at greater risk of burnout (see our August 9, 2016 Patient Safety Tip of the Week “[More on the Second Victim](#)”).

A number of the studies on physician burnout point to the electronic health record (EHR) as a significant factor contributing to burnout. Alexander and colleagues ([Alexander 2018](#)) discuss the 3 main features of burnout: lack of enthusiasm, lack of accomplishment, and cynicism/depersonalization. Then, in attempt to find reason for a significant increase in burnout prevalence between 2011 and 2014, they analyzed 5 major transformational medical practice events that occurred between 2011 and 2014 (pervasive hospital purchases of medical groups, rising drug prices, the Affordable Care Act, pay for performance, and mandated electronic health records). Analyzing those events for the 3 main burnout features, they concluded that only the HER met all 3 attributes of physician burnout.

A survey last year showed that 60% of neurologists have at least one symptom of burnout ([Busis 2017](#)). Bernat and Busis ([Bernat 2018](#)), in describing factors contributing to that high burnout rate, also point to the role of the EHR as a major detrimental factor. They state “Completion of EHR data entry during office visits disturbs the patient–physician relationship by diverting physician eye contact and attention away from the patient. Completion of the EHR outside of the visit markedly adds clerical time to already overburdened physicians, further aggravating work–life imbalance. Physicians’ awareness that the usurpation of patient visit time by mandated but unproductive EHR documentation compounds their sense that work is meaningless and increases their dissatisfaction with practice. Patients ultimately become harmed as a result. EHRs were mainly designed for primary care physicians. Successfully practicing neurology depends on a more thorough history and physical examination than many other specialties. It is difficult to enter a complete and accurate neurologic history and examination into an EHR and to review electronic records from colleagues.”

We found these comments from neurologist Steven Sergay ([Sergay 2018](#)) about how **physician burnout leads to patient burnout** particularly compelling:

“Our patients are becoming disillusioned about their caregivers and have dampened expectations for the care they receive. Their doctor no longer seems personally involved. Many patients feel helpless and bear a sense of defeat and resignation. Why, they ask, do we have to cope with both illness and care quality anxiety? My patients often recognize pursuit of efficiency over effectiveness. They complain their doctor is harried, their care hurried, mechanical, and lacking in humanity. They miss eye contact with their doctor, literally and figuratively. Their caregiver does not take the necessary time to know them as a person with an illness rather than as “a disease,” to understand their experiences, anxieties, and preconceptions, all of which may dictate their receptivity to care approaches and methods. They decry the absence of discussion and explanation. They perceive the increased risk of their diagnosis being missed or delayed by regimented care delivery and that this often leads to unnecessary testing and its product: increased cost. They see their caregiver being sidetracked by recordkeeping and administrative requirements. They fear their hospital care may be suboptimal without an advocate.”

A systematic review and meta-analysis of the literature ([Rotenstein 2018](#)) showed wide variability of reported rates of burnout or individual burnout symptoms. They note that the prevalence of burnout ranged from 0% to over 80%. They found marked variation in burnout definitions, assessment methods, and study quality. These findings preclude definitive conclusions about the prevalence of burnout and highlight the importance of developing a consensus definition of burnout and of standardizing measurement tools. Most of the published studies on burnout have used the Maslach Burnout Inventory (MBI) as a tool to assess burnout. It measures three main dimensions of burnout: emotional exhaustion, depersonalization and diminished personal accomplishment. In an accompanying editorial ([Schwenk 2018](#)) Schwenk and Gold point out the MBI was originally developed for assessing burnout in social service professionals. They question whether it has the same applicability in physicians.

Burnout may begin very early in one's medical career. Among US resident physicians, symptoms of burnout and career choice regret were prevalent, but varied substantially by clinical specialty ([Dyrbye 2018](#)). Training in urology, neurology, emergency medicine, and general surgery were associated with higher relative risks of reported symptoms of burnout relative to training in internal medicine. Another study of residents ([Williford 2018](#)) showed that 75% of general surgery residents met criteria for burnout (measured by the MBI), and 39% met criteria for depression (measured by the PHQ-9). Of those with burnout, 48% were at elevated risk of depression. Attendings and residents underestimated the prevalence of these conditions. The top 3 barriers to seeking care for burnout were: inability to take time off to seek treatment, avoidance or denial of the problem, and negative stigma toward those seeking care.

The overall message remains clear: burnout is a real problem and it contributes to medical errors and untoward patient outcomes. We, thus, need better ways to recognize physician burnout and interventions to offer support when we recognize it. Other industries have recognized job burnout and developed approaches to address it. We need to borrow from those industries and apply their approaches to healthcare. An excellent review on physician burnout also recently appeared in the Mayo Clinic Proceedings ([Olson 2017](#)).

So where do we start? In a commentary, Linzer ([Linzer 2018](#)) notes some factors contributing to burnout (eg. the EHR, chaotic workplaces, regulatory environment). We're not going to cure the inefficiencies brought on by the EHR and insurance/regulatory climates in today's column. Linzer also notes that stress and dissatisfaction in their role models and mentors may play a role in trainee's high rates of burnout. He does note that **workflow redesign** has been shown to have a positive impact on burnout.

A recent article ([Cheyney 2018](#)) showed how workflow optimization addresses physician burnout in physician practices affiliated with Virginia Mason Medical Center, They note that workflow optimization usually targets 3 categories :lack of set up, mismatch of supply and demand, and poor skill-task alignment so they focused primarily on three workflow optimization tactics that foster team work: spreading the work burden among

physicians, adoption of standardized work roles, and collocation of team members when feasible. That included having more patients seen by caregivers other than the physicians, including clinical pharmacists, care managers, RN's, physician assistants, and nurse practitioners. Care managers have a greater role in helping manage patients with diabetes or other chronic diseases. And they make use of clinical pharmacists, who may deal with patients taking antihypertensives, antidepressants, and chronic opioids, and help with medication reconciliation in patients recently discharged from the hospital. They also developed standards that allow staff other than physicians to handle some of the phone calls. They note that having such team members co-located on-site with the rest of the team is very valuable.

Another excellent paper from the National Academy of Medicine ([Smith 2018](#)) discusses how implementing optimal **team-based care** to reduce clinician burnout. Successful teams have the capacity to improve patient outcomes, the efficiency of care, and the satisfaction and well-being of health care clinicians.

And recall that our February 27, 2018 Patient Safety Tip of the Week "[Update on Patient Safety Walk Rounds](#)" noted a study in multiple settings in the Michigan Keystone collaborative to determine the impact of Walk Rounds (WR) on domains such as safety culture, employee engagement, burnout and work-life balance. Focus was on the importance of feedback ([Sexton 2017](#)). The researchers found that both personal burnout and burnout climate were lowest in work settings that had the highest rates of WR with feedback.

Lastly, we must get a better understanding of the factors related to high burnout rates among residents. We already noted that reducing burnout in attending physicians may help reduce burnout in residents. Some academic practices have implemented innovative programs for developing four "emotional intelligence" skills: self-awareness; self-management; social awareness; and social skills that may improve stress management skills, promote wellness, and prevent burnout in resident physicians ([Shahid 2018](#)).

Burnout is real. It's contagious. It's bad for physicians, nurses, and all healthcare workers. It's bad for our future generations of healthcare professionals. And, most of all, it's bad for our patients. All too long burnout has been treated as a nebulous concept and, as such, there has been little focus on solutions in healthcare. The time has come to focus on mitigating those environmental factors that take the fun and reward out of the practice of medicine.

References:

Tawfik DS, Profit J, Morgenthaler TI, et al. Physician Burnout, Well-being, and Work Unit Safety Grades in Relationship to Reported Medical Errors. Mayo Clinic Proceedings 2018; Published online: July 9, 2018
[https://www.mayoclinicproceedings.org/article/S0025-6196\(18\)30372-0/fulltext](https://www.mayoclinicproceedings.org/article/S0025-6196(18)30372-0/fulltext)

Vaidya A, Zimmerman B, Bean M. 10 top patient safety issues for 2018. Becker's Hospital Review 2018; January 09, 2018
<https://www.beckershospitalreview.com/10-top-patient-safety-issues-for-2018.html>

Panagioti M, Geraghty K, Johnson J, et al. Association Between Physician Burnout and Patient Safety, Professionalism, and Patient Satisfaction: A Systematic Review and Meta-analysis. JAMA Intern Med 2018; 178(10): 1317-1330
<https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2698144?widget=personalizedcontent&previousarticle=2698140>

Mossburg SE, Dennison Himmelfarb C. The association between professional burnout and engagement with patient safety culture and outcomes: a systematic review. J Patient Saf 2018; Epub ahead of print June 2018.
https://journals.lww.com/journalpatientsafety/Abstract/publishahead/The_Association_Between_Professional_Burnout_and.99342.aspx

Alexander AG, Ballou KA, Work-Life Balance, Burnout, and the Electronic Health Record. Amer J Med 2018; 131(8): 857-858
[https://www.amjmed.com/article/S0002-9343\(18\)30286-9/fulltext](https://www.amjmed.com/article/S0002-9343(18)30286-9/fulltext)

Busis NA, Shanafelt TD, Keran CM, et al. Burnout, career satisfaction, and well-being among US neurologists in 2016. Neurology 2017; 88: 1-12
<http://n.neurology.org/content/neurology/early/2017/01/25/WNL.0000000000003640.full.pdf>

Bernat JL, Busis NA. Patients are harmed by physician burnout. Neurol Clin Pract 2018 8: 279-280; published ahead of print June 18, 2018
<http://cp.neurology.org/content/8/4/279?etoc=>

Sergay SM. The burnout patient. Neurol Clin Pract 2018 8: 346-348; published ahead of print June 18, 2018
<http://cp.neurology.org/content/8/4/346?etoc=>

Rotenstein LS, Torre M, Ramos MA, et al. Prevalence of Burnout Among Physicians. A Systematic Review. JAMA 2018; 320(11): 1131-1150

https://jamanetwork.com/journals/jama/article-abstract/2702871?utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jama&utm_content=etoc&utm_term=091818

Schwenk TL, Gold KJ. Physician Burnout—A Serious Symptom, But of What? (editorial). JAMA 2018; 320(11) :1109-1110

<https://jamanetwork.com/journals/jama/article-abstract/2702852>

Dyrbye LN, Burke SE, Hardeman RR, et al. Association of Clinical Specialty With Symptoms of Burnout and Career Choice Regret Among US Resident Physicians. JAMA 2018; 320(11): 1114-1130

<https://jamanetwork.com/journals/jama/article-abstract/2702870>

Williford ML, Scarlet S, Meyers MO, et al. Multiple-Institution Comparison of Resident and Faculty Perceptions of Burnout and Depression During Surgical Training. JAMA Surg 2018; 153(8): 705-711

https://jamanetwork.com/journals/jamasurgery/article-abstract/2678983?utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jamasurgery&utm_content=etoc&utm_term=081518

Olson KD. Physician Burnout—A Leading Indicator of Health System Performance? Mayo Clinic Proceedings 2017; 92(11): 1608-1611

[https://www.mayoclinicproceedings.org/article/S0025-6196\(17\)30690-0/fulltext](https://www.mayoclinicproceedings.org/article/S0025-6196(17)30690-0/fulltext)

Linzer M. Clinician Burnout and the Quality of Care. JAMA Intern Med 2018; 178(10): 1331-1332

<https://jamanetwork.com/journals/jamainternalmedicine/article-abstract/2698140>

Cheney C. How Workflow Optimization Addresses Physician Burnout. HealthLeaders 2018; August 22, 2018

<https://www.healthleadersmedia.com/clinical-care/how-workflow-optimization-addresses-physician-burnout>

Smith CD, Balatbat C, Corbridge S. et al. Implementing Optimal Team-Based Care to Reduce Clinician Burnout. Discussion Paper. National Academy of Medicine 2017; September 17, 2018

<https://nam.edu/implementing-optimal-team-based-care-to-reduce-clinician-burnout/>

Sexton JB, Adair KC, Leonard MW, et al Providing feedback following Leadership WalkRounds is associated with better patient safety culture, higher employee engagement and lower burnout. BMJ Qual Saf 2017; Published Online First: 09 October 2017
<http://qualitysafety.bmj.com/content/early/2017/10/09/bmjqs-2016-006399>

Shahid R, Stirling J, Adams W. Promoting wellness and stress management in residents through emotional intelligence training. Advances in Medical Education and Practice 2018; 9: 681-686
https://www.dovepress.com/articles.php?article_id=40739

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