

Physician Burnout at a Children's Hospital: Incidence, Interventions, and Impact

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Physician wellness is essential for healthcare systems to function optimally. Poor physician wellness leads to burnout—a response to prolonged exposure to occupational stress encompassing feelings of emotional exhaustion, depersonalization, and reduced professional efficacy.¹ Physician burnout has been a significant concern nationally as more physicians voluntarily reduce their professional effort² accentuating the projected shortfall of physicians.³

Recent studies report that nearly 45% of doctors feel burnout in their work, higher than among other US workers.⁴

Burnout rates in pediatricians may reflect the unique prevalence of women in pediatrics—64% compared to 35% among all active physicians.^{5,6} Female physicians are significantly more predisposed to burnout with higher levels of emotional exhaustion, less satisfaction with their careers, and more frequent and more severe burnout symptoms.^{7–11} Additionally, the pressure to work longer hours due to shortages in pediatric subspecialties with multiple vacancies causing long wait times,¹² combined with lower reimbursement than our adult practice counterparts,¹³ may further accentuate burnout rates.

Burnout has severe consequences for physicians and patients, including loss of professionalism, medical errors, decreased patient satisfaction, and a higher incidence of patient safety events and suboptimal care delivery.^{14–18} Physicians affected by work stress may experience substance abuse, relationship troubles, depression, or even death. Physician suicide rates are estimated to be 6 times

higher than in the general population, and physician cardiovascular mortality is higher than population averages.^{19–23}

Causes of physician burnout include inefficient work processes and environments (eg, the burden of documentation in the electronic medical record)^{24–26} and rigorous training that teaches physicians to defer self-care and personal relationships to meet professional demands.²⁷ These lead to deterioration in physician health and resilience as a mismatch between resources and expectations grows.²⁸

Because suboptimal physician wellness affects the healthcare system, we must measure physician wellness routinely as an indicator of health-system quality.²⁹ At Dayton Children's Hospital, a freestanding hospital in Ohio, we evaluated burnout prevalence with surveys in February of 2018 and again in February 2019. Surveys included 3 questions from the Maslach Burnout inventory³⁰ and questions requesting a rating of possible key drivers of physician wellness.

We initiated a physician wellness committee after the 2018 survey and implemented various evidence-based physician wellness initiatives to address burnout. We sought to address system issues by conducting town hall meetings with the Chief Medical Officer to gauge the impact of electronic medical records and autonomy over workflows identified as key drivers in the 2018 survey (Fig. 1). Feedback obtained was communicated to senior leadership, and multiple interventions are being implemented. Additionally, to increase resilience and create a culture of support, we initiated meditation classes, a peer support program, provided resources for confidential mental health consultation, and created a document for new physicians delineating resources within the hospital to further their professional goals. We organized social events that included events celebrating the holiday season and festivals like Diwali (Diwali is a 5-day festival of new beginnings and triumph of good over evil and light over darkness celebrated by Hindus, Sikhs, and Jains) to increase camaraderie among physicians.

The repeat survey in 2019 showed fewer physicians feeling burned out, disengaged, and lacking control. A “sense of professional fulfillment” showed statistically significant improvement (based on the Pearson Chi-squared test), with 82% of physicians reporting a score of ≥ 7 of 10 in 2019 compared to 68% in 2018 (Table 1).



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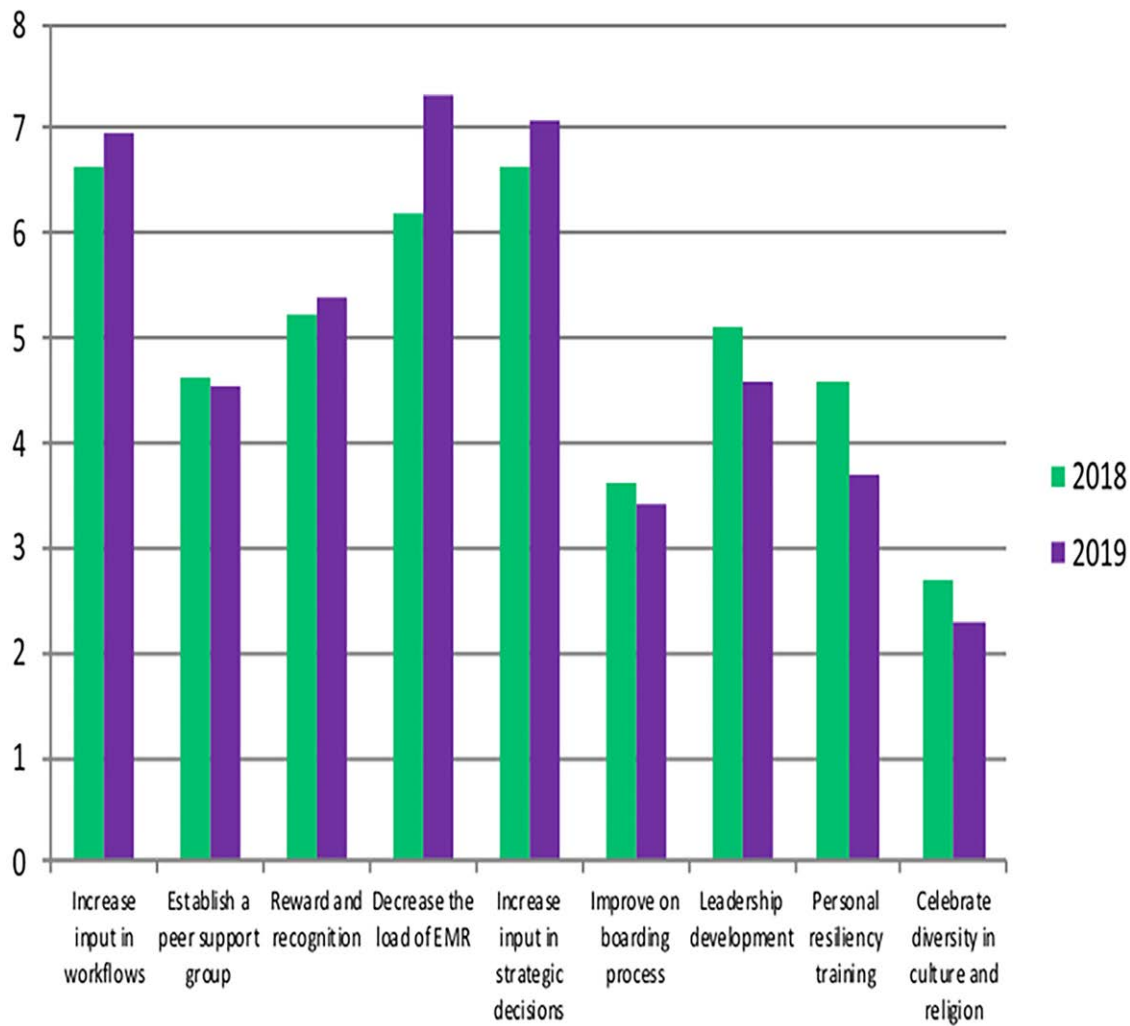


Fig. 1. Bar graph comparing the answer to the question: out of the following, please rate the interventions to improve your wellness in order of priority. Green square indicates survey 2018 answers. Purple square indicates survey 2019 answers. EMR, electronic medical record.

Table 1. Results of the First 6 Questions from the Physician Wellness Survey in 2018 and 2019

| Question | 2018 % n = 86 | 2019 % n = 94 | Statistical Significance (P) |
|---|------------------|------------------|---------------------------------|
| Feeling burn out a few times per month or more | 43 | 36 | 0.347 |
| Being callous towards work a few times per month or more | 15 | 17 | 0.728 |
| Felt disengagement and a loss of interest in their work few times per month or more | 18 | 14 | 0.504 |
| Felt a lack of control over their work schedule few times per month or more | 49 | 38 | 0.154 |
| Felt rewarded few times per month or more | 66 | 69 | 0.681 |
| Sense of professional fulfillment on a scale of 0–10 was rated as 7 or more | 68 | 82 | 0.025 |

The bold value indicates the measure was statistically significant according to the Pearson Chi-squared test.

Improving personal health was ranked high among the interventions desired to reduce burnout. The top 3 system issues identified included the burden of electronic medical records, the need for more autonomy at work, and an increasing role in determining workflow. We believe that our attempts to address physician burnout by providing organizational and individual-focused solutions^{31–34} had a positive impact.

This approach has been validated by West et al,³⁵ who reported that interventions reduced overall burnout

among participating physicians. They noted that individual (eg, mindfulness, discussion, and stress management) and organizational (eg, work environment) interventions produced similarly substantial improvements in burnout.³⁵

Fixing system issues can be challenging. It requires prolonged and concerted efforts from hospital leadership partnering with physicians, and a change in organizational culture to one where a physician-led structure that promotes high-level decision-making is respected and validated. Physicians must have input in determining

workflows and strategic initiatives to ensure autonomy in the workplace and a feeling of being valued.

We focused on enhancing awareness and a sense of community and increasing peer support among physicians to improve wellness and reduce burnout while initiating measures to address the burden of the electronic medical records and autonomy over workflow. Based on survey data, we believe these efforts helped cultivate a sense of community and a general feeling that we were not alone. Promoting these programs has conveyed the message that the hospital administrative leadership cares about physician well-being.

The limitations of this approach include a small sample size and an unvalidated survey tool. However, interventions we implemented were low cost, easy to apply, effective (by our measures), and thus high value. We feel that our approach to the problem is novel among children's hospitals.

In response to the survey, we created a committee (Strategic Committee for Physician Engagement) to enhance trust and accountability among physician leaders and senior leadership. The committee aims to include physicians in strategic initiatives early in the process so that their input has a meaningful impact.

One of the authors (A.M.), who has led organizational physician recruitment (125 new physicians) for the last 6 years, has noted that general pediatricians are leaving their practice and opting for work in urgent care units, hospitalist medicine, and emergency rooms. Eleven local pediatricians have left private practice and joined our urgent care, emergency room, and hospitalist group. An additional 8 have joined the hospital-owned pediatric practice. These positions offer better reimbursement¹³ and more flexible hours. Although we can only confirm this is a local trend, if present nationally, it might accentuate the current shortage of pediatricians.³⁶ We urge our professional societies like the American Academy of Pediatrics and the children's hospitals around the nation to assess this issue and address it carefully.

Medicine is a "calling" and not just a profession, and our efforts to address physician burnout at Dayton Children's Hospital reflect our belief that physicians have to advocate for their peers to ensure that our profession thrives. Physicians must continue to find meaning and joy in their work.

Physician burnout is a significant problem nationwide. We feel that pediatricians and pediatric subspecialists are at high risk of burnout due to the pediatric workforce's unique characteristics. Building a sense of community and focusing on personal wellness initiatives while working on the more challenging system issues may have an impact on reducing burnout among pediatricians and pediatric subspecialists.

DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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