Physician Burnout in Wisconsin: An Alarming Trend Affecting Physician Wellness

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ABSTRACT

Wisconsin physicians are experiencing burnout at levels that surpass national benchmarks. The Wisconsin Medical Society (Society), in conjunction with the American Medical Association (AMA), conducted a survey of 1,165 Wisconsin physicians to assess burnout and its contributing factors. The results indicate that primary causes of physician burnout include utilization and interactions with electronic health records (EHR), lack of a supportive practice environment, the loss of autonomy, and poor work/ life balance. Addressing physician burnout in Wisconsin calls for significant efforts by all relevant stakeholders, including insurers, government entities, health care systems and their executive leadership, and physicians themselves, and will require improving physician interactions with the EHR, increasing the physician role in administrative decision-making, and maintaining the focus of health care on the patient.

To lessen the impact of the key factors that lead to physician burnout, the Society plans to convene stakeholders to improve EHR functionality, develop and encourage physician leadership opportunities, create a Center for Physician Empowerment to unite stakeholders to lead systemic change through collective education and action, and pursue legislation to establish a Physician Health Program through the state government structure.

BACKGROUND

Physician burnout is a growing problem in the American health care system and is especially pronounced in Wisconsin. According to the Agency for Healthcare Research and Quality, burnout is defined as "a long-term stress reaction marked by emotional exhaustion, depersonalization, and a lack of sense of personal accomplishment." ¹

In 2009 and 2014, the Wisconsin Medical Society (Society) conducted surveys of physicians practicing in Wisconsin^{2,3} that revealed some startling statistics regarding the state of medicine and practice in the state. In 2014, 39.17% (n=398) of respondents reported that the time they spent in direct patient care over

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the previous year decreased, compared to 30.20% (n=315) of respondents in 2009. The 2009 survey indicated that 33.68% of physicians were not satisfied with the amount of time they were spending on direct patient care versus administrative work. During the 5 years between the 2009 and 2014 survey, there was a 23.43% increase in the number of respondents who reported that their practice utilizes an electronic health record (EHR), and almost three quarters of respondents (70.81%) in the 2014 survey indicated that the EHR has negatively impacted their workload.

On a national level, approximately 1 physician per day commits suicide,⁴ and suicide is the second leading cause of death among

medical students.⁵ In addition, by the year 2030 it has been predicted there will be a national shortage of 42,600 to 121,300 physicians.⁶

To assess current levels of burnout and determine ways to address the issue, in 2017 the Society commissioned a mini-Z survey (mini-Z) with the American Medical Association (AMA).⁷ The results of that survey and the Society's strategies to improve physician satisfaction are included in this report and compared to the similar surveys completed in 2009 and 2014.

METHODS

In 2017, to establish a benchmark against the national comparison, the Society, in collaboration with the AMA, conducted the mini-Z survey on physician satisfaction and burnout. An email invitation was delivered to 13,150 member and non-member physicians practicing in Wisconsin whose email address is listed in the Society's database. The full mini-Z survey had a total of 48 questions, including openended questions to allow physicians to expand on their responses. Respondents participated online, and the survey was open from

November 20, 2017 to January 6, 2018. Five days before the survey opened, a message was sent to 56 health system leaders announcing the survey. In addition to the initial email to physicians inviting them to participate in the survey, 2 more reminder emails were sent during the open period.

RESULTS

A total of 1,165 physicians anonymously responded to the 10 core questions for a response rate of 8.86%. (Questions can be found at https://www.wisconsinmedicalsociety.org/_WMS/publications/wmj/ pdf/117/5/Appendix-Hauer.pdf). This is a statistically significant rate for a 95% confidence interval with a 3% error rate.8,9 The 2017 response rate is .93% lower than in 2014 (n=1,016), and 1.51% lower than in 2009 (n = 1,044). Table 1 demonstrates that survey respondents are an accurate representation of physicians actively practicing in Wisconsin. Out of the 1,094 responses to the question regarding sex, 34.4% selected female (n=376), 62.6% selected male (n=685), and the remaining 3% chose not to answer (n = 33). This response is comparable to 2014 results, where 33% of respondents identified themselves as female and 67% as male. As Table 2 illustrates, the survey is also representative of the physician distribution by specialty in Wisconsin. The data in this report are compared against the 2014 study, Factors Affecting Physician Satisfaction and Wisconsin Medical Society Strategies to Drive Change² and the 2009 Society survey regarding physician satisfaction and burnout in the state of Wisconsin.3

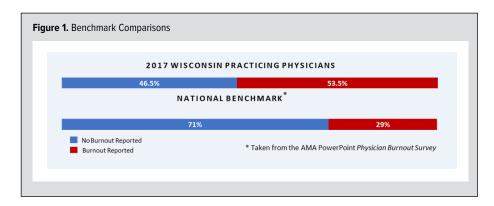
In 2014, 17.8% of the survey respondents reported no symptoms of burnout, and 46.9% reported experiencing moderate to severe symptoms of burnout. The 2017 survey results showed a 4.8%

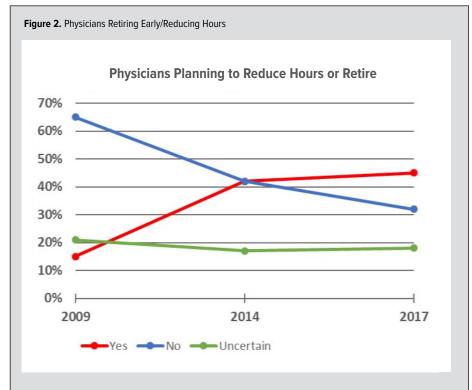
decrease in physicians reporting no burnout symptoms, bringing the total to 13%. This coincides with a 4.8% increase in physicians experiencing symptoms of burnout since 2014. The results also indicate that 53.5% of physicians in Wisconsin have at least 1 symptom of burnout and over one-third are dissatisfied with their profession—both of which are part of an increasing trend and exceed national averages (Figure 1).¹⁰

| 2018 Wisconsin Physician Demographics | | | 2017 Survey Demographics | | |
|---------------------------------------|--------|----------|--------------------------|-------|---------|
| Age Range | N | N÷13,700 | Age Range | N | N÷1,094 |
| 18-30 | 147 | 1.1% | 18-30 | 9 | 0.8% |
| 31-40 | 3,116 | 22.7% | 31-40 | 182 | 16.6% |
| 41-50 | 3,729 | 27.2% | 41-50 | 273 | 25.0% |
| 51-64 | 5,248 | 38.3% | 51-64 | 474 | 43.3% |
| 65+ | 1,429 | 10.4% | 65+ | 129 | 11.8% |
| Unknown | 31 | 0.2% | Unknown | 27 | 2.5% |
| Total | 13,700 | | Total | 1,094 | |
| Sex | N | N÷13700 | Sex | N | N÷1094 |
| Female | 4,805 | 35.1% | Female | 376 | 34.4% |
| Male | 8,893 | 64.9% | Male | 685 | 62.6% |
| Unknown | 2 | 0.0% | Prefer not to answer | 33 | 3.0% |
| Total | 13,700 | | Total | 1,094 | |

| 2018 Wisconsin Physician Demogra | 2017 Survey Demographics | | | |
|--------------------------------------|--------------------------|----------|-----|---------|
| Specialty | N | N÷13,700 | N | N÷1,017 |
| Allergy and Immunology | 73 | 0.5% | 8 | 0.8% |
| Anesthesiology | 823 | 6.0% | 48 | 4.7% |
| Cardiac/Thoracic Surgery | 67 | 0.5% | 3 | 0.3% |
| Cardiovascular Diseases | 393 | 2.9% | 20 | 2.0% |
| Dermatology | 199 | 1.5% | 13 | 1.3% |
| Emergency Medicine | 758 | 5.5% | 94 | 9.2% |
| Family Medicine | 2,485 | 18.1% | 214 | 21.0% |
| Gastroenterology | 186 | 1.4% | 9 | 0.9% |
| General Practice | 343 | 2.5% | 15 | 1.5% |
| nternal Medicine | 1,726 | 12.6% | 107 | 10.5% |
| Neurological Surgery | 95 | 0.7% | 3 | 0.3% |
| Neurology | 307 | 2.2% | 17 | 1.7% |
| Obstetrics/Gynecology | 584 | 4.3% | 38 | 3.7% |
| Oncology | 217 | 1.6% | 14 | 1.4% |
| Ophthalmology | 305 | 2.2% | 19 | 1.9% |
| Orthopedic Surgery | 454 | 3.3% | 41 | 4.0% |
| Other non-surgery related specialty | 686 | 5.0% | 62 | 6.1% |
| Otolaryngology | 164 | 1.2% | 9 | 0.9% |
| Pathology | 275 | 2.0% | 14 | 1.4% |
| Pediatrics | 1,170 | 8.5% | 90 | 8.8% |
| Physical Medicine and Rehabilitation | 195 | 1.4% | 10 | 1.0% |
| Plastic Surgery | 75 | 0.5% | 6 | 0.6% |
| Psychiatry | 643 | 4.7% | 56 | 5.5% |
| Pulmonary Disease | 118 | 0.9% | 14 | 1.4% |
| Radiation Oncology | 87 | 0.6% | 5 | 0.5% |
| Radiology | 613 | 4.5% | 27 | 2.7% |
| Rheumatology | 57 | 0.4% | 9 | 0.9% |
| Surgery | 567 | 4.1% | 46 | 4.5% |
| Vascular Surgery | 35 | 0.3% | 6 | 0.6% |

In the 2017 survey, Wisconsin primary care physicians (PCP) report the highest rates of burnout when compared to surgeons and other nonsurgical specialties. According to the 2018 Wisconsin Council on Medical Education and Workforce report, "40% of currently working PCPs are projected to retire by 2035." Further, based on the 2017 results, 47.1% or 6,194 Wisconsin physicians are considering reducing hours or retiring early in the next 5 years





(Figure 2); over a quarter (30.4%) of physicians in the 2017 survey indicated they would not recommend their career (Figure 3). When considered alongside Wisconsin's aging population, it is perhaps not surprising that the state is projected to experience a shortage of 745 FTE primary care physicians. 11

Physician burnout in Wisconsin can be traced to 3 categories as measured by the mini-Z survey: (1) clinical leader alignment, (2) EHR/documentation time, and (3) workload control. As related to these categories, physician interaction and dissatisfaction in their work environment are causing physicians to reevaluate their future in medicine. Nearly one-half (47.1%) of physicians are planning on retiring or decreasing their clinical hours in the next 5 years, which is an increase of 5.6% from the 2014 survey. Further, 47% (n = 519) of physicians indicated that their retirement plans have changed due to the health care environment, a 7.7% increase from 2014. With projected increases in physician shortages, health care systems and administrators must look at how are they addressing burnout to ameliorate future shortages.⁶

A developing trend among physicians is the increasing number of women physicians, specifically in family practice.¹¹ In 2017, the number of female medical students outnumbered males.¹² In Wisconsin, women will constitute a growing portion of family practice physicians by 2035,11 however, the 2017 survey illustrated women have a higher reported burnout rate compared to men. In Wisconsin, over half of the sample populations for both women (57%) and men (52%) are starting to exhibit symptoms of burnout or are completely burned out. Both sexes have experienced a decrease in physician satisfaction since the 2014 study. In the 3 years since the last survey, satisfaction among women physicians has decreased 11.3% and dissatisfaction has increased 12.1%.

Causes of Frustration/Burnout

In previous surveys, the EHR was reported to be a top stressor and concern for physicians. Sixty-five percent of clinicians in the 2017 survey agreed or strongly agreed that the use of an EHR adds frustration to their day. As Figure 4 illustrates, the number of hours physicians spend working on the EHR outside their workday directly correlates with their level of frustration with the EHR. Forty-two percent of physicians who spend zero to 2 hours working at home on the EHR report being frustrated with the EHR, which is almost half the frustration

level reported by physicians who spend 8 or more hours on the EHR outside of work. Of the 202 physicians who said they spend more than 8 hours working on the EHR at home, 85.1% (n = 172) reported frustration with the EHR. Since 2014, there has been a decrease in the number of physicians spending time at home in all the categories except in the 4- to 6-hour and > 8 hours ranges, which increased by 0.9 % and 5.7 %, respectively. Across all age groups, nearly two-thirds (64.2%) of physicians agree or strongly agree that the EHR adds frustration to their day.

Along with the EHR and time spent on documentation, increasing insurance and government regulation was the third most-mentioned stressor. One respondent in the 2017 survey said, "Too many outside forces are driving the practice of medicine. There is way too much bureaucracy diverting us away from caring for our patients..." while another expressed frustration with insurance companies, citing "...increasing doctor workloads" and noting that the EHR "is not really of increased value over the paper chart except to insurance companies who

will cut reimbursement if all the specific points THEY want are missing..."

As smaller practices consolidate with larger health systems, physicians are losing some of their autonomy. The 2017 survey showed that 16.4% of respondents own all or part of their practice, a drop from the 2009 survey, in which nearly a quarter (24.9 %) of respondents were full or part owners of their practice. Physicians who once were sole or shared decision-makers in their clinical work are now being told how to manage their practice, which adds to stress and, in turn, increases burnout.

DISCUSSION

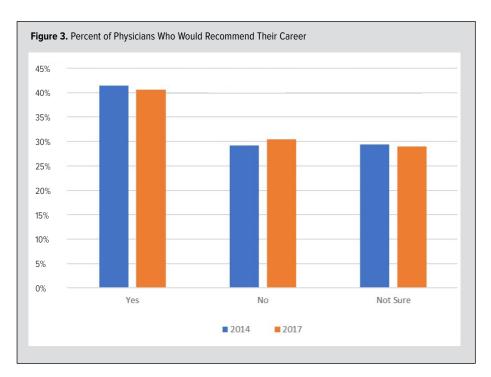
Electronic Health Records

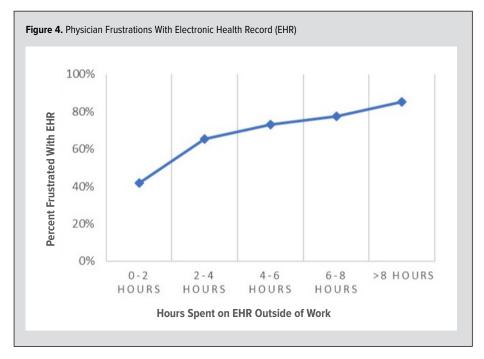
Multiple studies have highlighted the issue of EHRs and how they contribute to burnout. Physicians are spending nearly half their time—49.2%—utilizing the EHR and performing clerical duties.¹³ While frustration with the EHR is a symptom of physician burnout, its design and implementation are the ultimate contributor. In fact, in 2018, The Harris Poll on behalf of Stanford Medicine surveyed 521 PCPs regarding their EHR use and 44% of respondents viewed the function of the EHR as health storage rather than a health tool.¹⁴

These findings seem to be supported by Downing, et al.¹⁵ Since enactment of the Health Information Technology for Economic and Clinical Health (HITECH) Act in 2009, physicians' notes have doubled in length, resulting in EHR notes that are 4 times longer in the United States compared to other countries.¹⁵ The clerical requirements placed on physicians by the EHR require extensive time out-

side of normal working hours. ¹⁶ For every hour that physicians spend with patients, it takes 2 hours to complete notes in the EHR. ¹³ Physicians also report spending an additional 1 to 2 hours outside their work day on EHR and other administrative tasks. ¹³ While the EHR may provide flexibility for the physician to work wherever they choose, it has allowed health system leadership to increase the amount of work physicians must complete without giving consideration for increased workloads. ¹⁷

It has been reported that the use of scribes or other forms of assistance for documentation has increased the face-to-face time a physician can spend with a patient from 23.1% to 43.9%. Yet this





practice is more common among some specialties. In a study of 4 specialties—cardiology, orthopedics, internal medicine, and family medicine—documentation support was available more to cardiologists and orthopedists.¹³

Burnout Among Women

The Wisconsin Council on Medical Education and Workforce reported that 60% of family medicine physicians in Wisconsin under the age of 34 are women. The 2018 Medscape National Report on Physician burnout found that 48% of female physicians are burned out, compared to 38% of males. Research has shown

that female physicians spend more time communicating with patients than their male counterparts.¹⁹ However, that extra time adds up, and longer hours for female physicians increase the chances of burnout by 12% to 15%.²⁰ Based on the 2017 results, female physicians in Wisconsin are experiencing the pressure of increasing work hours as well, and 39.1% are considering retiring or reducing clinical hours within the next 5 years, a 4.3% increase from 2014.

This trend is echoed nationally. As women physicians have children, they are reducing their availability by 10.9 hours a week and rethinking their career choice. ^{21,22} One study found that only 28.9% of women have maternity leave included in their contract, and consequences for taking leave for a pregnancy include making up missed shifts, losing productivity bonuses, and owing money to the practice. ²² Within developed nations, the United States remains the only country that does not legally require paid maternity leave, and the majority of physician mothers who take maternity leave lose more than \$10,000 during their leave. ²² As more millennial generation women become physicians and mothers, changes will need to occur to create better work-life balance in order to encourage and keep women working in medicine. ²³

Lack of a Supportive Practice Environment

As mentioned previously, the number of physicians who reported owning their own practice has decreased from 24.8% in 2009 to 16.4% in 2017. Independent physicians have been shown to have lower burnout rates because they have more control over their work, leading to a higher sense of autonomy. Ariely and Lanier wrote that the current medical climate is the direct opposite of autonomy because, "The current procedures in medical reimbursement policies and technological advances are constantly moving physicians in the direction of less time spent with each patient and greater floods of information to manage or master."

Nearly half of the 2017 mini-Z respondents (49.9%) work with 1 to 24 physicians in a given practice, while the remaining 50.1% work in practices with 25 to >500 physicians. In fact, the largest percentage (19.6%) of physicians in Wisconsin work in practices with more than 500 physician full-time equivalents.

Physicians expressed frustration that employers do not value their voice as a health care leader, and most physicians believe they do not have influence in the health care system.²⁷ One of the 2017 survey respondents wrote, "I don't feel that my input is valued to the degree that it should be and most of the time I feel like a consultant to the team rather than a team leader." Another respondent expressed concern that the "goal of (an) institution is money rather than patient care." Many physicians commented that providing high-quality care and caring for patients are their top priorities, not profits. As previous research has found, when physicians and hospital administrators have conflicting viewpoints regarding the health care environment, care of the patient could be negatively affected.²⁸

Government and Insurance Regulations

Physicians feel they have lost control of the practice of medicine and are increasingly burdened by the changing government and insurance regulations.²⁹ As the Merit-based Incentive Payment System (MIPS) is implemented, it will add more documentation requirements, which may increase administrative work for physicians.¹⁵ While the EHR promotes the collection of data, hospital systems are encouraging the creation of new data to be measured to have a financial edge. 15 Along with collecting an increasing amount of data, physicians also are having to justify their treatment to insurance companies for payment. In 2017, the AMA released a physician survey regarding prior authorizations and the impact it has on the patient. Sixty-four percent of physicians reported that a decision from the insurance company took at least 1 business day, with 30 of physicians having to wait at least 3 business days.³⁰ The delay in prior authorizations can not only lead the patient to decide to forgo the treatment, but it has been found to create on average an additional 14.6 hours of administrative work for physicians and staff.³⁰

Limitations

It should be noted that the 2017 study differs from the 2014 and 2009 studies. Because the mini-Z survey was used in 2017, the questions are not worded identically to the 2014 and 2009 surveys, nor were they developed and conducted by the same entities. In addition, the studies were not longitudinal, and it is not known if the 2014 and 2009 respondents participated in the 2017 survey. Although all surveys were a representative sample of physicians actively practicing in Wisconsin, they do not include physicians who have left medicine due to burnout. Future studies should include this population.

SOCIETY STRATEGIES AND RECOMMENDATIONS

Physician burnout is the result of the action and inaction of multiple health care stakeholders, including health care insurers, EHR/technology vendors, policymakers, hospital systems and physicians themselves. Informed by the findings of this survey and current research and literature, the Society will work to address this issue with the following strategies: (1) improve the functionality of the EHR, (2) enhance physician leadership and involvement in decision-making, (3) create a Center for Physician Empowerment, and (4) collaborate with state policymakers to create a Physician Health Program.

The EHR

Physicians completing the survey identified the EHR as the largest contributor to burnout. At the same time, the EHR has become integral to modern health care. The Society suggests that examining *how* the EHR is utilized in physician practices and understanding the reasons behind physicians' frustration is necessary to address this issue. It is important that physicians be engaged in discussions before, during, and after EHR implementation. Instead of telling

them how EHR integration will happen, administrators should offer the opportunity for input from all health care employees potentially affected by the EHR. It is also important that EHR vendors including Epic, Cerner, and others recognize the impact EHRs have had on physician well-being and that they commit to identifying and addressing the causes of this dissatisfaction.

Further, instead of approaching the EHR and computer as a barrier to patient care, physicians and administrators should consider how they can be used to engage patients in their health.³¹ Examples include placing the computer in the exam room so that it faces the patient and allows the physician to make direct eye contact³² and exploring different models of care to increase the face-to-face time physicians have with their patients. The Ambulatory Process Excellence model (APEX) designed by the University of Colorado is an example that increases the ratio of medical assistant to clinicians at 2.5:1.17 With this model, medical assistants gather patient information before the physician enters the exam room, then remain in the exam room to document the physician visit. In the first 6 months after implementation, burnout rates decreased from 53% to 13%.17 The use of administrative support allows the physician to provide more direct patient care and removes some of the administrative burden, which potentially could decrease burnout. 13,33

The Society aims to convene vendors, physicians, administrators, and other stakeholders to work collaboratively and explore solutions like these and others that will mitigate the negative impact of EHRs on physician burnout.

Physician Leadership and Autonomy

Administration and physicians have different roles within health organizations, however, open communication can provide an opportunity for collaboration between the two and aid in ensuring that the patient is the top priority.²⁸ For example, Advocate Health Care, headquartered in Illinois, recognized the need for physician feedback and formed a steering committee to facilitate communication between physicians and management.³⁴ The committee expressed concerns regarding the lack of physicians' leadership skills, which led to the creation of an 18-month long mentorship program that identifies and pairs potential physician leaders within the organization and allows a space for collaboration and learning that encourages physicians to develop their leadership skills. The program had such a high success rate there are plans to expand it.³⁴

Medical schools also are recognizing the need to develop physician leadership skills and some are offering Master of Business Administration programs in conjunction with the medical degree. However, even though it has been found that physician-led hospitals receive higher quality and cancer care scores, it is not essential that health care organizations be led exclusively by physicians. Rather, there needs to be open communication between clinical and nonclinical executives, as

well as a working environment that encourages all physicians to provide feedback.^{35,36}

To facilitate physician leadership, the Society plans to develop physician leadership and mentorship programs and will continue to build on the success of its annual CMO Leadership Summit, which brings together chief medical officers and other physician leaders from health care organizations throughout the state to collaborate and share expertise. The Society also will continue to engage physicians and health care systems in its "Leading Healthy Work Systems" curriculum, a program that employs a systems approach to better understand how changes in one part of the system ripple across the rest, affecting the mental and physical health of physicians and patients alike.

Physician Wellness Action Center

As mentioned earlier, physician burnout cannot be directed at one specific group, but multiple health care stakeholders, including insurers, EHR/technology vendors, policymakers, hospital systems, and physicians themselves. In 2019, the Society will create a Center for Physician Empowerment with a mission "to lead the battle against burnout by motivating and empowering all stakeholders to take action." The Center will cultivate discussion and encourage collaboration across all levels of the health care land-scape. Stakeholders will engage in collective education and action to implement organization change to lessen the impact of the key factors that lead to clinician burnout. Through participation in events, programming, pilot projects, and a digital community, they will have access to collaborative opportunities and best practices in addressing this critical issue.

Physician Health Program

Physician health programs are designed to be a resource for physicians suffering from mental or physical difficulties that threaten their ability to provide a minimal standard of care and thus threatening patient and physician safety. Programs nationwide have an admirable record of successfully helping physicians with mental and physical challenges, thus enhancing the quality and effectiveness of medical care for patients. As we pursue work environment changes to help prevent physician burnout, it is also important to help physicians whose burnout may have manifested to the point where physician health program services are critical.

Currently, Wisconsin is one of only a few states without a dedicated physician health program. The Society's program was ended in 2007 due to legal concerns and difficulties coordinating funding for the program, which was open to both member and nonmember physicians. To ensure a robust program independent of any employer pressures, the Society is pursuing legislation during the 2019-2020 legislative biennium that will create a physician health program within the state government structure that can help physicians obtain needed treatment.

CONCLUSION

The AMA Code of Medical Ethics states, "physicians' primary ethical obligation is to promote the well-being of individual patients."³⁷ Addressing the causes of burnout will allow physicians to focus on their patients and making complex medical decisions. Through a coordinated, collaborative effort among all stakeholders, we can decrease physician burnout, strengthen our health system, and improve patients care.

Acknowledgements: The authors would like to thank the following individuals for their support and assistance with this paper: Clyde "Bud" Chumbley, MD, MBA, Laura Jacobs, Kendi Parvin, John Rather, JD, and The Wisconsin Medical Society Physician Experience Task Force: John Beasley, MD, Catherine Lee, MD, Randall Levin, MD, Michal McGrail, MD, Jose Ortiz, MD, Douglas Reding, MD, MPH, FACP, Peter Sanderson, MD, Heather Schmidt, DO, Alpa Shah, MD, and Gregory Thompson, MD.

Financial Disclosures: None declared.

Funding/Support: Funding for the AMA mini-Z survey was provided in part by a grant to the Wisconsin Medical Society Foundation from the Physicians Foundation.

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