

# original contributions

# Frequency and Causes of Burnout in US Community Oncologists in the Era of Electronic Health Records

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**QUESTION ASKED:** What is the presence of individual burnout symptoms among community oncologists, and what are the major factors contributing to work-related stress?

**SUMMARY ANSWER:** There is a high prevalence of symptoms of burnout among practicing US community oncologists. Despite identifying individual symptoms of burnout within themselves, the oncologists do not seem to accept or recognize that they might be suffering burnout, and they mostly believe that they are managing their stress well. The greatest stressor identified was the electronic health record (EHR), especially the need to complete EHRs at home after work hours.

**WHAT WE DID:** We conducted Web-based paid surveys of US community oncologists/hematologists from September-November 2018. Physicians were asked about frequency of burnout symptoms, drivers of work-related stress, and their perceptions on management of workload.

WHAT WE FOUND: Among the 163 physicians surveyed, 46% felt a substantial amount of stress at work. Most physicians felt emotionally (85%) and physically (87%) exhausted. A majority of physicians felt lethargic (67%), ineffective (64%), and/or detached (63%). In a typical workweek, 93% needed time beyond time allocated to clinical care to complete work responsibilities. EHR responsibilities caused moderate to excessive stress at work for 67% of physicians, and 79% of physicians worked on EHRs outside of clinic hours. Other sources of excessive stress identified

included changing reimbursement models (33%), interactions with payers (31%), and increasing patient and caregiver demands (31%). A third of physicians have considered retiring early or changing their career path to cope. To combat burnout, physicians' practices have used advanced practice providers, invested in information technology, and/or hired additional administrative staff. However, the majority of physicians stated they had optimal or good control over their workload.

**BIAS, CONFOUNDING FACTORS:** Limitations included a small sample size with a limited representation of practices in rural areas.

REAL-LIFE IMPLICATIONS: Physician burnout, characterized by exhaustion of physical or emotional strength, cynicism, and lack of achievement, has become a worsening phenomenon in medicine, contributing to higher health care costs and patient/physician dissatisfaction. Major stressors for the modern-day community oncologist arise from EHRs, time spent beyond clinical hours to complete work duties, payer interactions, and escalating patient expectations. If not recognized and addressed by health care systems and practices, burnout among oncologists will lead to additional attrition in a stretched workforce by early retirement or change in career path. The discordance between oncologists' admission of stress and exhaustion while claiming good control over those same burdens warrants exploration in future research, along with research to reduce after-hours work and other key burnout components.

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**BACKGROUND** Physician burnout, characterized by exhaustion of physical or emotional strength, cynicism, and lack of achievement, has become a worsening phenomenon in medicine, contributing to higher health care costs and patient/physician dissatisfaction. How burnout has affected hematologists and oncologists is not well studied

**METHODS** US community oncologists/hematologists were queried via a Web-based survey from September-November 2018. Physicians were asked about frequency of burnout symptoms, drivers of work-related stress, and their perceptions on management of workload.

**RESULTS** Among the 163 physicians surveyed, 46% felt a substantial amount of stress at work. Most physicians felt emotionally (85%) and physically (87%) exhausted. A majority of physicians felt lethargic (67%), ineffective (64%), and/or detached (63%). In a typical workweek, 93% needed time beyond time allocated to clinical care to complete work responsibilities. Electronic health record (EHR) responsibilities caused moderate to excessive stress at work for 67% of physicians; 79% of physicians worked on EHRs outside of clinic hours. Other sources of excessive stress were changing reimbursement models (33%), interactions with payers (31%), and increasing patient and caregiver demands (31%). A third of physicians have considered retiring early or changing their career path to cope. To combat burnout, physicians' practices have used advanced practice providers, invested in information technology, and/or hired additional administrative staff. However, the majority of physicians stated they had optimal or good control over their workload.

**CONCLUSION** Most oncologists experience burnout symptoms and require additional time beyond that allocated to clinical care to complete their workload. The discordance between oncologists' admission of stress and exhaustion while claiming good control over those same burdens warrants exploration in future research.

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### INTRODUCTION

Occupational burnout has been recognized as a worsening problem among physicians over the past decade. Although definitions vary, the typical triad of burnout includes emotional exhaustion, depersonalization, and lack of accomplishment. In May 2019, the 11th revision of International Classification of Diseases (ICD-11) clarified and expanded the definition of burnout as a syndrome of 3 dimensions—feelings of energy depletion or exhaustion, increased mental distance from one's job or feelings of cynicism or negativism about one's job, and reduced professional efficacy. Although the earlier ICD-10 version defined burnout as "a state of vital exhaustion" and listed it under "life-management difficulty," this new

definition categorizes burnout as an occupational phenomenon rather than a medical condition. Even though burnout was first recognized as an occupational syndrome in the 1970s, the awareness that it can preferentially affect physicians has come to light in the past 2 decades. <sup>4-7</sup> With the recognition and acceptance of physician burnout as an entity within the medical community, the prevalence has been alarming, such that many consider it a health care crisis. <sup>8</sup> In one recent study, over half of the physicians surveyed reported at least 1 symptom of burnout and were twice as likely to suffer from burnout compared with nonphysicians within the US working population. <sup>9</sup>

Physician burnout can have far-reaching repercussions on the health care system and can affect

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patients, practice facilities, the economy, and physicians themselves. There is evidence that physicians experiencing burnout are more likely to report medical errors, which can compromise the quality of care and contribute to increased health care costs. 10,11 Burnout is associated with absenteeism, as well as alcohol and tobacco abuse. 12 It can contribute to physicians seeking alternative employment, quit their medical practice, consider early retirement, and reduce their work hours. 12,13 Burnout leads to attrition in the workforce, causing physicians and clinical teams left behind to shoulder heavier workloads, and thus, make them more vulnerable to burnout. Such attrition has the potential to destabilize a practice, hospital, and health care system. Although it is difficult to assign a precise cost of burnout to the overall economy, one recent analysis reports an estimated annual loss of \$4.6 billion, attributable to physician turnover and decreased work hours alone. 14,15 Furthermore, burnout is associated with higher rates of depression, mental illness, and suicide, which can lead to disastrous consequences for the physicians, their families, colleagues, and patients. 16 Despite some variation in prevalence within specialties, no medical specialty is immune to it.9,12,17,18

Medical oncologists, irrespective of geographic region, appear to be at greater risk for burnout, given their long work hours, frequent loss of patients for whom they care, need to prescribe toxic therapies, and witnessing human suffering that may arise from the cancer itself or the therapy administered. 19-21 Furthermore, increasing workloads in the face of caring for patients with high physical, psychological, and emotional needs can gradually result in social isolation for oncologists, which in turn can worsen work-life imbalance, trigger domestic and workplace conflicts, accelerate burnout, and increase the risk of mental illness.<sup>22</sup> This issue of burnout among oncologists has appropriately gained prominence in the current decade with recognition of the problem by professional societies such as ASCO, community coalitions, and occupational health experts.<sup>23-26</sup>

There have been attempts to identify the causes of such increased prevalence among oncologists. The nearuniversal adoption of electronic health record (EHR) systems in the United States over the past 5 years has influenced physician workflow and affected job satisfaction negatively.<sup>27,28</sup> EHR adoption has been particularly labor intensive for medical oncologists because of the high volume of laboratory tests, radiologic tests, and prescriptions and controlled substance orders written for the average patient with cancer. In addition, oncologists have had to master the process of electronic order entry for chemotherapy. More recently, programs such as the Medicare-sponsored Merit-Based Incentive Payment System and the Oncology Care Model have added even more documentation responsibilities to the oncologist's workflow.<sup>29</sup>

Thus, to better assess their present-day work stressors, we queried US oncologists/hematologists via a Web-based questionnaire, with the objectives of identifying key factors causing work-related stress, calculating the frequency of burnout symptoms, and identifying methods used to manage increasing workload in the EHR era. We hypothesized that in addition to long work hours, EHR and payer interactions would be contributors to work-related stress among oncologists.

### **METHODS**

Between September and November 2018, Cardinal Health surveyed US medical oncologists and/or hematologists to better understand their perceptions of physician burnout. Physicians were asked multiple-choice and Likert scale questions via a Web-based survey (premeeting) and followed up with discussion on the responses during live meetings. Participants were invited from a research network of group purchasing organization (GPO)-agnostic, majority community oncologists engaged by Cardinal Health for practice and real-world evidence research. All physicians who accepted the invitation completed the survey. Physicians were paid an honorarium for completing the survey and attending the follow-up live meeting.

The survey tool was not validated and collected both qualitative data based on physician perception as well as quantitative data. The survey questions were developed by 2 medical oncologists, with a total of 47 years of practice experience spanning community and academic oncology and supported by epidemiologists and biostatisticians. The survey aimed at gathering present-day insights on stress at work, management of stress, frequency of burnout symptoms (eg, emotional and physical exhaustion, feeling lethargic), drivers of burnout (eg, patient caseload, interaction with payers, lack of work-life balance), management of increasing workload (eg, hiring staff, adding resources), and shifts in career and practice that physicians have considered.

All response options were categorical. Responses were summarized using descriptive statistics calculated by counts and frequencies. Physician characteristics were stratified by (1) whether they experienced stress and (2) whether they spent time beyond regular clinical hours working on EHRs. Statistical comparisons across these strata were made by  $\chi^2$  tests (all tests performed on categorical data).

### **RESULTS**

### **Physician Characteristics**

A total of 163 US-based oncologists and/or hematologists were surveyed during, and ahead of, 3 live meetings conducted between September 2018 and November 2018 (Table 1). Respondents represented a variety of practice types: 25.2% were in solo or small practices (2-5)

TABLE 1. Practice Characteristics of Participating Physicians

Beyond Clinic Hours Work on EHRs<sup>b</sup>

				Work-Re	Work-Related Stress Status <sup>a</sup>	s Statusª		More	More Than	Minir	Minimal to	
	0ve (N =	0verall (N = 163)	Present (n = 75)	sent 75)	Not P (n =	Not Present (n = 88)		Excess EHRs (I	Excess Time on EHRs (n = 70)	Time o	Satisfactory Time on EHRs (n = 93)	
Characteristic	No.	%	No.	%	No.	%	8.	No.	%	No.	%	d
Practice setting												
Solo or small practice	41	25.2	15	20.0	26	29.6	.082	15	21.4	56	28.0	.288
Medium or large practice	51	31.3	27	36.0	24	27.3		27	38.6	24	25.8	
Community practice owned by a hospital or academic center	19	11.7	2	6.7	14	15.9		9	8.6	13	14.0	
Otherd	52	31.9	28	37.3	24	27.3		22	31.4	30	32.3	
Years in practice												
0-10	52	31.9	23	30.7	59	33.0	.934	23	32.9	59	31.2	.354
11-19	48	29.5	23	30.7	25	28.4		24	34.3	24	25.8	
> 20	63	38.7	59	38.7	34	38.6		23	32.9	40	43.0	
Urbanicity												
Urban	69	42.3	31	41.3	38	43.2	792	36	51.4	33	35.5	.032
Suburban	74	45.4	36	48.0	38	43.2		30	42.9	44	47.3	
Rural	20	12.3	8	10.7	12	13.6		4	2.7	16	17.2	
US region			19	25.3	11	12.5						
Northeast	30	18.4					.122	15	21.4	15	16.1	629.
Midwest	48	29.5	17	22.7	31	35.2		18	25.7	30	32.3	
South	89	41.7	31	41.3	37	42.1		28	40.0	40	43.0	
West	17	10.4	∞	10.7	6	10.2		6	12.9	∞	8.6	

NOTE. Source: Physician survey, Cardinal Health, September-November 2018.

Abbreviation: EHR, electronic health record.

aphysicians responded to a 5-point Likert scale (Strongly agree, Agree, Neither agree nor disagree, Disagree, Strongly disagree) as a response to the statement, "I feel a significant amount of stress at work." Seventy-five of 163 providers strongly agreed or agreed with this statement. The remaining 88 were across the other 3 categories.

Physicians responded to a 5-point Likert scale (Minimal to none, Modest, Satisfactory, More than desirable, Excessive) as a response to the question, "On average, the amount of time I spend on EHRs at nome after work is...." Seventy of 163 providers had spent more than desirable or excessive amounts of time. The remaining 93 were across the other 3 categories

<sup>°</sup>Compansons across these strata were made by  $\chi^2$  tests.

<sup>&</sup>lt;sup>d</sup>Noncommunity-based practices, including academic centers and Veterans' Administration hospitals.

physicians); 31.3% were in large-sized (> 10 physicians) or medium-sized (6-10 physicians) practices; 11.7% were in hospital-owned or academic center-owned community practices; and 31.9% were in noncommunity-based practices (including academic centers and Veterans' Administration hospitals). Participants represented all geographic areas in the United States (41.7% from the South, 29.5% from the Midwest, 18.4% from the Northeast, and 10.4% from the West). In terms of experience, 31.9% of the physicians had up to 10 years, 29.5% had 11-19 years, and 38.7% had 20 or more years of experience. Most physician practices were located in urban or suburban areas (87.7%).

When asked whether they felt stressed at work, 75 (46.0%) of 163 participating physicians reported feeling a substantial amount of stress at work. Additionally, 70 (42.9%) worked on EHRs at home after clinic hours. In Table 1, physician characteristics are presented by stress status and after-clinic hours of EHR work. A higher proportion of physicians experiencing stress were part of medium- or large-sized practices compared with physicians who did not experience stress, albeit not statistically significantly

different (36.0% v 27.3%; P = .08). Physicians' years of experience and geographic location did not influence physician stress (both P > .05). Furthermore, a higher proportion of physicians working more than desirable to excessive hours on EHRs were practicing in urban areas compared with physicians who spent minimal time on EHRs (51.4% v 35.5%; P = .03). Physician practice setting, years in practice, and region of practice did not affect the time spent on EHRs.

### **Physician Burnout**

Physicians were asked to specify the frequency with which they experience various burnout symptoms on a Likert scale that ranged from Never to Always (Fig 1A). Most physicians felt emotionally (85.3%) and physically (86.5%) exhausted at some point, with 15% of physicians being frequently emotionally or physically exhausted. A majority of physicians felt lethargic (66.9%), unaccomplished or ineffective (63.8%), and/or cynical or detached (62.6%).

In a typical workweek, 92.6% of respondents (n = 151) stated they needed additional time, beyond time allocated

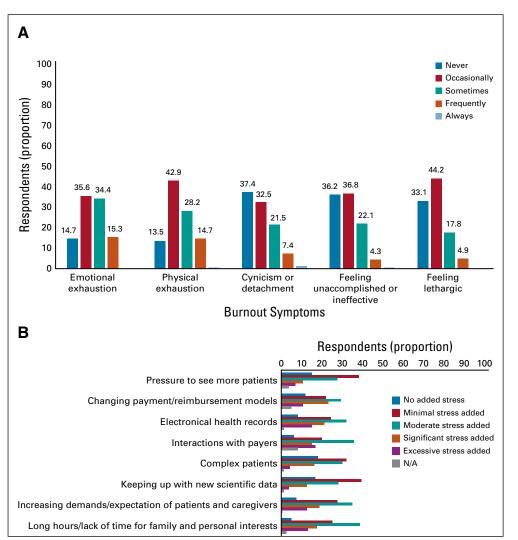


FIG 1. (A) Frequency of burnout symptoms. Question: How often do you experience the following at work?: Never; Occasionally; Sometimes; Frequently; Always. (B) Factors contributing to stress levels. Question: How do each of the following factors contribute to your stress level at work? Does not add any stress; Adds minimal stress; Adds moderate stress; Adds significant stress; Adds excessive stress (N/A, not applicable; categories not mutually exclusive). Source: Physician survey, Cardinal Health, September-November 2018.

to clinical care, to complete work responsibilities. Of these 151 physicians, 38 (25.3%) needed 1-3 hours, 56 (37.1%) needed 4-6 hours, 32 (21.2%) needed 7-9 hours, and 25 (16.5%) needed  $\geq$  10 hours of additional time per week to complete their work. Physicians provided their perceived magnitude of stress caused by various factors that contributed to their burnout on Likert scales: No added stress, Minimal stress added, Moderate stress added, Significant stress added, and Excessive stress added (Fig 1B). EHR responsibilities caused moderate to excessive stress at work for 66.9% of physicians (Fig 1B). Other sources of excessive stress were changing reimbursement models (33.1%), interactions with payers (31.3%), and increasing patient and caregiver demands (30.7%).

### Stress and Workload Management

Physician stress and workload management are presented in Table 2. Additionally, 57.1% of physicians described their practice atmosphere as busy or very busy. However, 77.3% of physicians stated that their stress was manageable, and 62.6% had an optimal or good workload. Physicians reported steps taken to make their workload more manageable, as well as shifts in career and practice that they considered to address the increased workload; to combat burnout, physicians' practices have used the following strategies: used advanced practice providers (APPs; 46.0%), invested in information technology (33.1%), and/ or hired additional administrative staff (31.3%). Few physicians (6.7%) had thought of selling or merging their practice. Because of increasing demands, 19.6% of physicians had considered retiring early, whereas 14.7% had considered changing their career path.

### **DISCUSSION**

This survey of practicing US community-based oncologists reflects stressors encountered in the current work environment and in the era of near-universal EHRs. The key takeaways are 3-fold. First, there was a high prevalence of symptoms of burnout within this cohort of oncologists. Second, despite identifying individual symptoms of burnout within themselves, the oncologists do not seem to accept or recognize that they might be suffering from burnout, and they mostly believe that they are managing their stress well. Third, EHRs were shown to be a major stressor, especially the need to complete EHRs at home after work hours.

The presence of at least 1 symptom of burnout in this group of oncologists is consistent with other reports, with 50% of the participants reporting emotional exhaustion always, frequently, or sometimes. <sup>19</sup> Despite reporting burnout symptoms, a majority of oncologists reported good control over their workload. There are psychological theories to account for such behavior that have been summarized as "perceived burdensomeness" (a sense that one is a burden on others, not wanting to burden colleagues by taking time off), "thwarted belongingness" (a sense that one does not

belong to a valued social group, social isolation, and reluctance to seek help), and "learned fearlessness." This may explain why previous reports have found that oncologists claim to be happy with their career choice despite suffering burnout. 19 Other important findings include that over a third of the participants considered retiring early or changing their career path. These latter phenomena have a strong association with burnout.31 In a report based on a national survey of oncologists conducted in 2012-2013, 27% reported plans for reducing work hours over the next 12 months. 31 Although over 40% of our participants stated that they plan to either retire early, sell or merge the practice, or make a career change because of work-related stress, this proportion does not match those who identify themselves as having burnout. Potential explanations for this phenomenon are a lack of awareness of the specifics of the burnout syndrome and/or a hesitation in admitting to such symptoms; the latter may arise from a perceived stigma associated with burnout, which can range from a self-perception of failure or a sense of guilt or shame. A more optimistic explanation is that these oncologists are coping well and plan on managing stress in their work life by making career changes.

In our cohort, we did not find any association of the years in practice, geographic location, and practice size or affiliation with work-related stress and hours spent on EHRs, suggesting that no age or geography is immune to it. There was a trend favoring rural practices in terms of work-related stress as well as hours spent on EHRs compared with suburban and urban practice locations; however, the representation of rural practices was limited.

This work has several strengths. The majority of participants were community oncologists, whereas past results have been skewed toward academic physicians. The participants were geographically dispersed, represented various models of employment, and were GPO- and EHR-agnostic. Unlike national surveys that typically have low response rates of 15%-25%, we were able to obtain responses from all the oncologists with no attrition. Notably, they were paid fair market value for their participation. Furthermore, with the survey being anonymized, being administered by an independent third party, and unaffiliated with the employer, it is reasonable to assume that the participants could disclose their thoughts without fear of being stigmatized by colleagues or their practice. It is also notable that there have been limited reports of the contributions of EHRs to burnout among oncologists. Search terms of "oncology" or "oncologist" with "burnout" and "electronic medical record" or "electronic health record" yielded no results. Although myriad reports have evaluated the role of EHRs in burnout among primary care and other specialties, we did not find any reports specifically addressing the contribution of EHRs to burnout among oncologists. 32,33 Over a third of the study participants reported spending 7 or more hours per week beyond office hours completing EHR entries. Other studies

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TABLE 2. Physician Stress and Workload Management

Responses (N = 163)	No.	%
Practice atmosphere (question 1)		
Not busy	5	3.1
Slightly busy	14	8.6
Moderately busy	51	31.3
Busy	84	51.5
Very busy/frenetic	9	5.5
Stress management (question 2)		
I have no problems managing stress at work	49	30.1
I am under stress, but am able to manage it effectively	77	47.2
I frequently experience stress and sometimes worry about burnout	34	20.9
I regularly experience symptoms of burnout	3	1.8
Control over workload (question 3)		
Optimal	23	14.1
Good	79	48.5
Tolerable	55	33.7
Poor	6	3.7
Steps taken to make workload more manageable <sup>a</sup> (question 4)		
Hiring advanced practice providers	75	46.0
Investing in information technology and systems improvements	54	33.1
Hiring additional administrative staff	51	31.3
Adding greater flexibility to physician schedules	35	21.5
Providing work-life balance education and support services	24	14.7
Selling or merging the practice	11	6.8
None of the above	41	25.2
Considered the following because of increased workload <sup>a</sup> (question 5)		
Retiring early	32	19.6
Making a career change	24	14.7
Selling or merging the practice	12	7.4
I prefer not to answer	25	15.3
None of the above	85	52.2

### Questions

- 1. Which of the following best describes the atmosphere of your practice?
- 2. Which of the following best describes how you typically manage stress at work?

(continued in next column)

**TABLE 2.** Physician Stress and Workload Management (continued) 3. My control over my workload is: Optimal; Good; Tolerable; Poor

- 4. Has your practice taken any of the following steps to make workloads more manageable? Please select all that apply.
- 5. As a result of stress at work, I have seriously considered: Please select all that apply.

NOTE. Source: Physician survey, Cardinal Health, September-November 2018.

<sup>a</sup>Not mutually exclusive.

have reported that physicians who spent over 6 hours weekly after hours on EHR work were 2.9 times more likely to report burnout and 3.9 times more likely to attribute burnout to the EHRs, highlighting the impending burnout.<sup>34</sup>

Limitations of the current study include a limited sample size and lack of a formal validated tool, such as the Maslach Burnout Inventory. However, others have demonstrated high correlation with an abbreviated questionnaire. Abbreviated scales to assess burnout and physician distress have been used previously. 35-37 Furthermore, to identify the present-day stressors for practicing oncologists, it is essential to go beyond the validated instruments that can help diagnose burnout but lack the capacity to delineate the underlying drivers that can be specific to each specialty in medicine.

In this cohort, major contributors to stress were related to payers (changing payment models, interactions with payers) and EHRs (including long hours), and were not patient related; most participants did not list keeping up with scientific data, seeing more patients, or dealing with complex patients as the major contributors to stress. In terms of managing work-related stress, hiring of APPs seems to be the predominant method, with a third planning a career change. To successfully address the key stressors, an expansion in the oncology team is needed. Oncologists need regular education in the evolving reimbursement models, and practices need nonphysician team members with domain expertise in payer policies. Growing patient expectations can be limited by clinical teams (physician, APP, nurse, medical assistant) to address patient needs, with each team member working at the top of their education and licensure. Long hours are a consequence of time spent in clerical tasks, managing heightened patient expectations, and dealing with payers. Automating repetitive tasks and assigning them to nonphysician team members can be particularly helpful.<sup>27</sup>

Given that all investments in staff and technology have a price tag attached, we suggest a multilayered approach for the prevention, identification, and management of burnout. At the health care system level, organizational leaders, including hospital and insurance executives, administrative leaders, and physician leaders, need to be educated on the syndrome to eradicate any dismissive attitudes toward burnout. The indirect cost of burnout to

their specific organizations with projections in dollars is most likely to grab their attention.

At the practice/division level, oncologists in practice and oncology trainees would benefit from regular screening for burnout to identify early signs so that some corrective measures may be implemented before the development of a full-blown syndrome. Open dialogue, advocating as a group, and building a sense of community are important.<sup>38</sup>

Professional societies can also play a role. In addition to promoting education and awareness, as successfully spearheaded by ASCO, professional societies have the potential to create "virtual support groups" within the membership to help deal with burnout outside the boundaries of the oncologist's hospital or practice. In this era of social media and technologic advancement, a "buddy system" or a "matching service" within the membership seems to be an achievable task. Professional societies could potentially advocate on behalf of the membership to address issues that rank high as stressors, for example, negotiating simple fixes to the complex preauthorization and preapproval processes to decrease payer denials of essential care prescribed by oncologists.

In addition to ongoing efforts at resiliency training and recognition of burnout starting with residency training,

a greater understanding of the drivers of burnout at the individual level is needed. For instance, personal and cultural factors, such as ethnicity, race, religion, religiosity, sex, sexual orientation, immigration status, marital status, occupation of a partner, and child and elder care responsibilities can all affect work-life balance and hence, be precipitants for or protectants from burnout. Although systemic improvements can be expected to evolve slowly, individual interventions can be the easiest to achieve, provided the oncologist is willing and able to share specifics without fear of judgement, retaliation, or retribution.

With greater awareness and education about burnout among physicians over the past decade, there appear to be hints of improvement in the prevalence of burnout with 45.5% reporting at least 1 symptom in 2017 versus 54.4% in 2014.<sup>38</sup> Although these numerical improvements are encouraging, additional strides will require a multipronged approach involving stakeholders beyond physicians. In closing, most US oncologists experience symptoms of burnout and require additional time beyond that allocated to clinical care to complete their workload. The discordance between oncologists feeling burdened by stress and exhaustion while claiming good control over their work is noteworthy and should be the focus of future research.

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## AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST AND DATA AVAILABILITY STATEMENT

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### **AUTHOR CONTRIBUTIONS**

Conception and design: Ajeet Gajra, Bela Bapat, Yolaine Jeune-Smith, Chadi Nabhan, Bruce Feinberg
Administrative support: Chadi Nabhan
Provision of study materials or patients: Ajeet Gajra
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Manuscript writing: All authors
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### **AUTHORS' DISCLOSURES OF POTENTIAL CONFLICTS OF INTEREST**

### Frequency and Causes of Burnout in US Community Oncologists in the Era of Electronic Health Records

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