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Policy Changes Key To Promoting Sustainability And Growth Of The Specialty Palliative Care Workforce

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ABSTRACT Specialized palliative care teams improve outcomes for the steadily growing population of people living with serious illness. However, few studies have examined whether the specialty palliative care workforce can meet the growing demand for its services. We used 2018 clinician survey data to model risk factors associated with palliative care clinicians leaving the field early, and we then projected physician numbers from 2019 to 2059 under four scenarios. Our modeling revealed an impending “workforce valley,” with declining physician numbers that will not recover to the current level until 2045, absent policy change. However, sustained growth in the number of fellowship positions over ten years could reverse the worsening workforce shortage. There is an immediate need for policies that support high-value, team-based palliative care through expansion in all segments of the specialty palliative care workforce, combined with payment reform to encourage the deployment of sustainable teams.

Evidence demonstrates improvement in outcomes for patients, caregivers, and health systems when specialty palliative care teams are integrated into the care of people with serious illness.¹ Yet little is understood about the specialty palliative care workforce itself. Such an understanding is particularly timely to seek for three reasons.

First, the integration of specialty palliative care services into routine care is increasing. Previously viewed as synonymous only with end-of-life care, palliative care has moved upstream and is increasingly integrated from time of diagnosis throughout the course of serious illness.² The field has experienced considerable growth in the number of consultation teams,³ outpatient clinics,⁴ community-based palliative care models,⁵ and medical specialty societies that recommend specialty palliative care involvement.⁶ Second, the number of patients with serious illness

who are eligible for palliative care services is expected to grow considerably over the next few decades as a result of the rapid growth of the aged population, better understanding of which patients are eligible for palliative care,⁷ increasing awareness of the value of specialty palliative care,⁸ and evolving palliative care consultation triggers and patient identification tools.⁹ Third, deficits in the number of palliative care clinician specialists exist, with gaps estimated in the thousands.¹⁰

Research examining these concerning workforce gaps is critical to proposing solutions to policy makers and health system leaders. Research must include modeling potential solutions, which range from expanding training programs to addressing burnout and resilience.¹¹ Furthermore, the impact of timely policy proposals to expand the specialty workforce, such as the Palliative Care Hospice and Education Training Act (H.R. 647) (discussed below) and

the expansion of avenues to enter the workforce,¹² must be considered in assessing the future of the field.

We collaborated with specialty societies in palliative care to survey their members regarding work characteristics and burnout. Our primary objectives were to examine the relationship between risk factors and the desire to leave the field early and to model the palliative care workforce population using simulations of policy changes.

Study Data And Methods

We conducted an electronic survey of specialty hospice and palliative care clinicians in the period October 1–November 23, 2018. The protocol was approved by the Duke University Institutional Review Board as exempt research (Duke IRB Protocol No. 00045381).

SURVEY DESIGN The base survey consisted of fifty-two questions. Respondents were presented with up to nine additional questions based on their professional clinical discipline—chaplaincy, medicine, nursing, pharmacy, physician assistant, or social work.

The survey was organized into four sections: burnout and compensation, work intentions, clinical practice characteristics, and areas of work life. Burnout was assessed using the Maslach Burnout Inventory Human Services Survey for Medical Personnel, a twenty-two-item self-assessment of job-related feelings on a seven-point Likert-scale.¹³ The survey was designed and reviewed by a steering committee that consisted of physicians (Arif Kamal, Joseph Rotella, and Phillip Rodgers), a nurse (Constance Dahlin), a social worker (Victoria Leff), and a chaplain (George Handzo). The survey was reviewed, iterated, and updated through three rounds, with changes suggested by the majority of investigators being incorporated after each round.

PARTICIPANTS Members of the American Academy of Hospice and Palliative Medicine, Hospice and Palliative Nurses Association, Healthcare Chaplaincy Network, Spiritual Care Association, Social Work Hospice and Palliative Care Network, Society of Pain and Palliative Care Pharmacists, Association of Oncology Social Work, or Physician Assistants in Hospice and Palliative Medicine received an initial invitation to participate in the survey, followed by at least two reminder notices. Social media approaches (for example, Twitter and blog posts) complemented email. Those who responded that their primary professional role was palliative care or hospice clinician were included in this analysis.

VARIABLES DERIVED FROM THE SURVEY Throughout this analysis, we examined four

cohorts based on clinical discipline: physicians (attending physicians and physician-fellows), nurses (registered nurses and the two types of advanced practice registered nurses, clinical nurse specialist and nurse practitioner), social worker, and all others (for example, physician assistants, pharmacists, and chaplains). Because of the minimum sample sizes needed for modeling, clinical groups with fewer than a hundred members were grouped into the “other” category. Two primary predictors of interest were the presence of burnout (the primary predictor in our models; the calculation of burnout is explained in the online appendix)¹⁴ and the intention of leaving the field of specialty palliative care early. We defined “leaving early” as current age plus time until leaving full-time practice (self-reported from the survey) of less than sixty-five years, based on current data on the average physician retirement age.¹⁵ We also considered other commonly tested factors related to burnout and early retirement; details are in the appendix.¹⁴

MODELING LEAVING THE WORKFORCE We fit a logistic regression model to test our hypothesis that burnout would be associated with increased odds of leaving the workforce early for any clinician. This was a multivariable model based on a bootstrap variable selection algorithm. Details on how the bootstrap variable selection was performed are in the appendix.¹⁴

METHODS FOR PHYSICIAN WORKFORCE PROJECTIONS Our workforce projections were limited to physicians, because these are the only palliative care clinicians whose numbers of certified individuals and trainees are known.

We estimated numbers of physician clinicians over the next forty years (2019–59), using data supplied by the American Board of Medical Specialties and the American Osteopathic Association to the American Academy of Hospice and Palliative Medicine. These data demonstrated that 7,618 physicians were board certified in hospice and palliative medicine in 2019.¹⁶

We created a multistate Markov model with five states: practicing without burnout, practicing with burnout, retired without burnout, retired with burnout, and dead. The model was run under four different scenarios. In the “base case” (that is, current) scenario, we assumed no increase in the current annual number of palliative care fellowship positions (325) and no change in annual incidence of burnout (3.00 percent). In the second scenario, we projected dramatic fellowship growth. We averaged the absolute annual growth rate of palliative care fellowship programs in 2009–18, which was twenty-five new fellowship positions per year. Then we projected that this annual growth would continue for the next ten years, through 2028. Thus, we modeled

325 positions in 2018, 350 positions in 2019, 375 positions in 2020, and so on through 2028, with no additional growth after that (in other words, the number of positions was held constant at 575 per year). In this scenario, we assumed no change in the 3.00 percent burnout incidence. In the third scenario, the base case plus burnout reduction, we assumed no additional fellowship positions (that is, the number was held constant at 325 per year) but the introduction of an intervention that reduced the incidence of burnout by 25 percent (from 3.00 percent to 2.25 percent per year). In the final scenario, dramatic fellowship growth plus burnout reduction, we combined the increase in the number of positions in the second scenario and the reduction in burnout in the third scenario.

We developed a patient-to-physician service ratio using the numbers of physicians available annually in 2019–59 and the numbers of Medicare enrollees eligible to receive palliative care services during the same time period. Patient estimates were taken from Amy Kelley and coauthors.^{7,17} We took the mean of two scenarios proposed by Kelley and coauthors: 6 percent of Medicare-eligible patients (the strict criteria scenario) and 18 percent of Medicare-eligible patients (the serious illness criteria scenario). Thus, we used 12 percent of the people eligible for Medicare over the next forty years as the population eligible for palliative care. Population estimates were taken from the Census Bureau.¹⁸

LIMITATIONS There are important limitations to our analysis. First, our decision modeling did not include feedback loops, where an increasing workforce shortage would result in higher workload and higher burnout. Thus, the number of available physicians from the decision models may be slightly higher than what may occur over time.

Second, although our data set represents the largest-ever specialty-specific collection of workforce intentions in the country, we had hoped for a more robust overall response rate.

Third, our estimates of patients eligible for palliative care services come from Medicare populations only and do not account for people younger than age sixty-five, who account for up to 50 percent of palliative care consultations in some communities.¹⁹ Furthermore, though other estimates of patients eligible for palliative care exist, our analysis focused on what we believe is the estimate most cited from the article by Amy Kelley and coauthors.¹⁷

Fourth, we developed workforce projections based on the understanding that burnout is a permanent state, difficult to reliably and meaningfully reverse in a large population. Our model

Our analysis predicted untenable current and projected workloads for specialty palliative care physicians.

therefore focused on prevention as the key intervention.

Fifth, we calculated numbers of people in the workforce at any given time but not full-time-equivalent effort. Given that many clinicians divide palliative care clinical responsibilities with other specialties, our projections are likely an overestimation of the clinical effort available from the projected number of certified specialists. On the other hand, our methodology did not account for members of the workforce who practice in hospice and palliative care settings without certification in the subspecialty, and we therefore might have underestimated the total clinical effort available.

Lastly, we assumed a static percentage of Medicare patients eligible for palliative care services over the next forty years. Estimating the magnitude or direction of changes in the populations eligible for consultation remains speculative.

Study Results

CHARACTERISTICS OF SURVEY RESPONDENTS We received 2,212 responses that met our inclusion criteria. We excluded 103 participants because of missing data, which left 2,109 for analysis. A comparison of the included and excluded cohorts is in appendix table 4.¹⁴ The best estimate of the response rate is derived from the physician response rate, which was about 18 percent (826 responses from 4,522 physician members). Response rates from other disciplines were difficult to calculate as eligible survey participant numbers were not clear.

Exhibit 1 presents the demographic and work characteristics of the 2,109 eligible survey responders. Most clinicians were female, across all cohorts. Eighty-six percent of all respondents were age thirty-five or older. Nearly half of physicians were age fifty-six or older. As the specialty is relatively young, the large proportion of older clinicians suggests that many entered the field as a second career. Over 90 percent of clinicians were white, and the most common relationship

status was married. Over 80 percent worked full time, and the mean number of hours worked per week was 42.5 (standard deviation: 13.6). Direct patient care constituted the majority of work effort, ranging from 66 percent (SD: 25.6) for physicians to 83 percent (SD: 24.0) for social workers. We observed differences in clinical practice settings, with physicians reporting spending an average of nearly 10.0 percent (SD: 23.8) of clinical effort in a nonpalliative care, nonhospice specialty (such as primary care and oncology), while the shares were 3.9 percent (SD: 14.8) for nurses, 5.5 percent (SD: 18.0) for social workers, and 9.0 percent (SD: 18.9) for other clinicians.

BURNOUT PREVALENCE AND EFFECTS ON LEAVING THE FIELD EARLY Burnout was reported by approximately one-third of physicians, nurses, social workers, and other respondents (exhibit 2). We noted no differences in the prevalence of burnout by clinical role, and we observed higher frequencies of emotional exhaustion than depersonalization among respondents. Further, 49.6–62.0 percent of clinicians reported high professional fulfillment.

Respondents who reported burnout had 1.40 (95% confidence interval: 1.09, 1.80; $p = 0.0075$) times the odds of intending to leave the field early (appendix table 5).¹⁴ Additionally, we observed that compared to physicians, nurses had higher odds (1.61; 95% CI: 1.26, 2.05), as did social workers (1.92; 95% CI: 1.41, 2.61). Finally, compared to respondents with good work-life balance, those with poor balance had 1.36 (95% CI: 1.09, 1.69) higher odds of intending to leave early. In both the adjusted and unadjusted analyses, the presence of burnout was associated with increased odds of intending to leave early.

PROJECTIONS OF THE PHYSICIAN PALLIATIVE CARE WORKFORCE Exhibit 3 demonstrates the results of the Markov model for physicians (Markov modeling was not performed for non-physician clinicians, as absolute numbers were not available for those populations). In all scenarios we projected a nadir, or “workforce valley,” in the palliative care physician workforce in the near future. The magnitude of the reduction varied by scenario. For example, we projected that the number of physicians would slowly decline over the next fourteen years, with a nadir of 6,660 physicians in 2033 in the base case (that is, with no policy change). Without any policy change, we projected that physician numbers would not return to their 2019 level until 2045. With policy changes to dramatically increase the number of fellowship positions and reduce burnout incidence, we observed only a slight decrease to 7,413 physicians in 2024, with a sizable peak of 16,145 physicians in 2059. In

EXHIBIT 1

Demographic and work characteristics of clinicians in the specialty palliative care workforce, 2018

Characteristic	Physician	Nurse	Social worker	Other ^a
AGE (YEARS)				
Number of clinicians	551	1,035	397	126
35 or fewer (junior)	14.0%	9.3%	19.4%	24.6%
36–55 (mid-career)	49.7	43.2	51.1	50.0
56 or more (senior)	36.3	47.5	29.5	25.4
SEX				
Number of clinicians	548	1,026	396	125
Male	45.4%	5.5%	4.8%	36.0%
Female	54.6	94.5	95.2	64.0
RACE				
Number of clinicians	549	1,033	396	126
White	85.6%	94.1%	92.2%	86.5%
Black	1.8	1.6	2.8	4.8
American Indian or Alaska Native	0.0	0.6	1.0	0.8
Native Hawaiian or Pacific Islander	0.4	0.2	0.0	0.0
Asian	8.7	1.4	0.5	4.8
Other	3.5	2.1	3.5	3.2
HOURS WORKED PER WEEK IN HOSPICE OR PALLIATIVE CARE				
Number of clinicians	549	1,019	391	126
Median	50.0	40.0	40.0	40.0
Quartile 1	36.0	40.0	38.0	30.0
Quartile 3	55.0	50.0	45.0	47.0
DIRECT PATIENT CARE (% OF TOTAL PROFESSIONAL RESPONSIBILITY)				
Number of clinicians	551	1,035	397	126
Median	70.0%	90.0%	95.0%	75.0%
Quartile 1	50.0	50.0	75.0	60.0
Quartile 3	90.0	100.0	100.0	95.0

SOURCE Authors' analysis of data from the 2018 workforce survey. **NOTES** All differences across professional categories were determined to be significant ($p < 0.05$) using chi-square tests. Appendix table 1 is an expanded version of the table (see note 14 in text). ^aIncluded sixty-one chaplains, forty-four pharmacists, sixteen physician assistants, two psychologists, two students, and one occupational therapist. Percentages do not add up to 100 because of rounding.

that scenario, physician numbers reached a level in 2036 that was not achieved in the base case until 2059.

Exhibit 4 plots projected patient-to-physician service ratios for the period 2018–58. Patients eligible for palliative care were defined as 12 percent of Medicare beneficiaries in any given year. Estimated numbers of certified palliative care physicians were derived from Markov simulations. In 2019 we estimate that there are 808 beneficiaries eligible for palliative care for every one physician. We project that this ratio will worsen across all scenarios in the short term, with the situation worsening to 1,380 eligible beneficiaries for every one physician in 2038 in the base case (that is, no policy change). We project that an increased number of fellowships will be needed to achieve a patient-to-physician ratio in the future that will be equal to or better than that in 2019. Even then, the ratio would not return to the 2019 level until 2045.

EXHIBIT 2

Burnout and professional fulfillment among clinicians in the specialty palliative care workforce, 2018

	Physician	Nurse	Social worker	Other ^a
AT RISK FOR BURNOUT				
Number of clinicians	551	1,035	397	126
Not burned out	66.4%	68.1%	70.3%	69.0%
With burnout (EE \geq 27 and/or DP \geq 10) ^b	33.6	31.9	29.7	31.0
EMOTIONAL EXHAUSTION^c				
Number of clinicians	551	1,035	397	126
High EE (27+)	28.9%	29.8%	24.9%	25.4%
Median score	19.0	19.0	18.0	20.0
Quartile 1	12.0	11.0	11.0	12.0
Quartile 3	28.0	29.0	26.0	27.0
DEPERSONALIZATION^{d**}				
Number of clinicians	551	1,035	397	126
High DP (10+)	20.1%	9.7%	13.6%	14.3%
Median score	4.0	3.0	3.0	3.0
Quartile 1	2.0	1.0	1.0	1.0
Quartile 3	8.0	6.0	6.0	7.0
PERSONAL ACCOMPLISHMENT^{e***}				
Number of clinicians	544	1,007	385	124
Median score	43.0	42.0	41.0	41.0
Quartile 1	39.0	38.0	37.0	38.0
Quartile 3	46.0	45.0	44.0	44.0
PROFESSIONAL FULFILLMENT^f				
Number of clinicians	551	1,023	396	125
High professional fulfillment (PF \geq 18)	58.1%	62.0%	55.3%	49.6%
Median score	18.0	19.0	18.0	17.0
Quartile 1	15.0	16.0	15.0	14.0
Quartile 3	22.0	21.0	21.0	20.0

SOURCE Authors' analysis of data from the 2018 workforce survey. **NOTES** Significance was determined using chi-square tests of distributions across professional categories. Appendix table 2 is an expanded version of the table (see note 14 in text). ^aIncluded sixty-one chaplains, forty-four pharmacists, sixteen physician assistants, two psychologists, two students, and one occupational therapist. ^bBurned out is defined as having a score of 27 or higher on emotional exhaustion (EE), a score of 10 or higher on depersonalization (DP), or both, in the Maslach Burnout Inventory (MBI) Human Services Survey for Medical Personnel. ^cScore on the emotional exhaustion subscale of the MBI. ^dScore on the depersonalization subscale of the MBI. ^eScore on the personal accomplishment subscale of the MBI. ^fDerived from first six questions of the Professional Fulfillment Index (PFI) from Trockel M, Bohman B, Lesure E, Hamidi MS, Welle D, Roberts L, et al. A brief instrument to assess both burnout and professional fulfillment in physicians: reliability and validity, including correlation with self-reported medical errors, in a sample of resident and practicing physicians. *Acad Psychiatry*. 2018;42(1):11–24. **p < 0.05

Discussion

Our analysis of the survey responses from a robust sample of 2,109 specialty palliative care clinicians produced three key findings. First, we identified risk factors associated with intentions to leave the field early, including being a nonphysician clinician, having burnout, and having a poor work-life balance. With about one-third of clinicians demonstrating burnout, this presents significant challenges to retaining all clinicians in the field. Second, we observed that approximately 40 percent of the specialty palliative care physician workforce was age fifty-six or older, which resulted in a projected rise in

retirements in the next decade. This produced a nadir in workforce size (or “workforce valley”) across all modeled scenarios. With no policy changes, physician workforce numbers will not recover to their 2019 level until 2045. Third, all scenarios demonstrated a worsening of the patient-to-physician ratio for at least twenty-five years (2020–45), due to an inadequate physician supply coupled with a growing cohort of Medicare beneficiaries eligible for palliative care. We did not project the ratio ever returning to the 2019 level without dramatic growth in the number of fellowship positions. Efforts to modestly reduce the burnout rate would have relatively small impact, compared to that of growth in training programs.

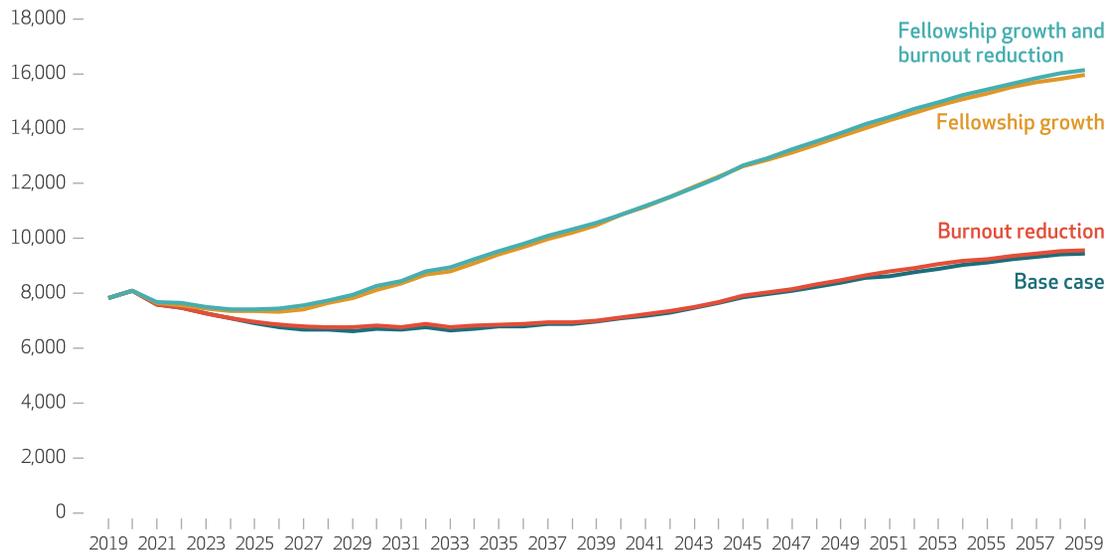
Our analysis also predicted untenable current and projected workloads for specialty palliative care physicians. We estimated that there was one palliative care physician for 808 eligible patients, and if each patient was evaluated, on average, once every three months (in either a clinic or a hospital), each palliative care physician would need to perform ten patient visits per day over forty-eight weeks per year to meet the current demand. Assuming no policy changes and a service ratio nadir of 1,380 patients to one physician in 2038, we projected that each physician would need to perform twenty-three visits per day. Putting this into perspective, best practices in the intensive care unit (possibly the closest comparator because of high medical complexity and time intensity) suggest that physicians should care for fewer than eight patients per day.²⁰

We compared these findings to other recent examinations of the workforce. Recently Dale Lupu and coauthors calculated ideal service ratios and then applied the target ratio to projections of growth in the population ages sixty-five and older.¹⁰ The authors modeled growth of thirty additional trainees per year until 2030 (comparable to our approach, which used twenty-five additional trainees per year until 2028). Lupu and coauthors estimated a supply of 7,856 specialty physicians without any additional trainees and 12,663 with additional trainees in 2035. Our analysis estimated between 6,783 (with no additional trainees) and 9,541 (with additional trainees) physicians in 2035, reflecting a more somber projection. Differences in the conclusions of these studies stem from adjustments for age and burnout. Both studies were optimistic that up to 575 fellowship positions could be funded and that newly established positions would be filled by interested candidates.

Our analysis was limited to the physician workforce because of data availability. However, even with the prevailing interdisciplinary team

EXHIBIT 3

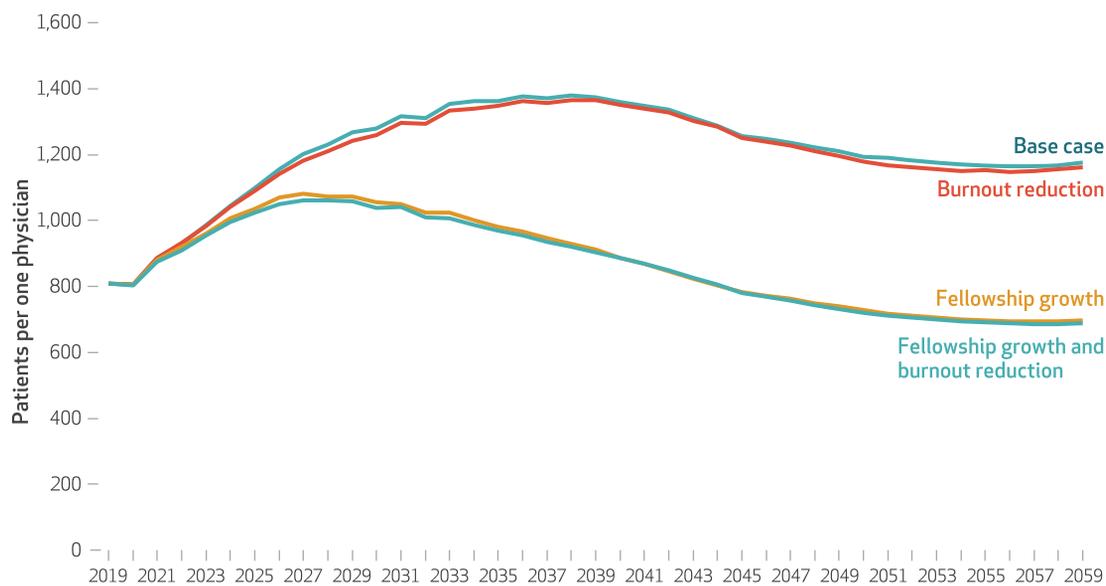
Projected numbers of certified specialty palliative care physicians in alternative scenarios, 2018–58



SOURCE Authors’ analysis of results from multistate Markov modeling using the current number of specialty palliative care physicians from the American Board of Medical Specialties and American Osteopathic Association, alongside demographic characteristics of clinicians and burnout rates from the 2018 workforce survey. **NOTES** The “base case” scenario assumes no increase in the current annual number of palliative care fellowship positions (325) and no change in the annual incidence of burnout (3.00 percent per year). The “burnout reduction” scenario assumes no change in the number of positions but a 25 percent decrease in burnout incidence in 2019 (from 3.00 percent to 2.25 percent per year), with no subsequent change. The “fellowship growth” scenario assumes no change from the base-case model in the annual incidence of burnout but annual growth of fellowship positions of 25 in the period 2019–28 with no additional growth after 2028 (that is, held constant at 575 per year). The “fellowship growth and burnout reduction” scenario assumes the changes in both the fellowship growth and burnout reduction models.

EXHIBIT 4

Projected numbers of Medicare patients eligible for palliative care per certified specialty palliative care physician in alternative scenarios, 2018–58



SOURCE Authors’ analysis of results from multistate Markov modeling and projections of people eligible for Medicare from the Census Bureau (see note 18 in text). **NOTES** The scenarios are explained in the notes to exhibit 3. We assume that 12 percent of the population eligible for Medicare would be eligible for palliative care, as explained in the text.

approach to palliative care,^{21,22} our projected patient volumes would be unsustainable because of the intensity and complexity of visits and the effort required to manage patients between visits (with phone calls, caregiver support, administrative tasks such as prior authorizations, and so on). No matter how the physician data are analyzed, there exists no tenable way forward without the increased use of interdisciplinary palliative care team members in the assessment and management of patient and caregiver distress. Furthermore, as more palliative care services are delivered in home and community-based settings, each clinician can see fewer patients per day because of travel time, particularly in suburban and rural communities. Though our data described a minimal effect of burnout on current workforce projections, intentional efforts to prevent worsening of the burnout rate in the future must be in place.

Policy Implications And Opportunities

We recommend five policy changes to address the adequacy and sustainability of the specialty palliative care workforce.

First, we recommend passage of the Palliative Care and Hospice Education and Training Act, which was reintroduced in the US House of Representatives in January 2019. This legislation previously had bipartisan support in both the House and the Senate. Among its key provisions, the act would fund the development of physician-leaders through palliative care academic career development awards, which are modeled on the federally funded Geriatrics Academic Career Award (GACA) Program. These competitive awards would provide salary support for early-career physicians to develop clinical, educational, and research expertise and grow into leadership roles in their institutions, communities, and the field. Using the GACA funding model, we estimate that the act's current authorization would provide awards for fifty physician-leaders in its first five years. A recently published analysis demonstrated that each GACA recipient had an impact on approximately 183 interdisciplinary trainees.²³ Based on these data, we project that 9,300 additional health professionals would receive palliative care education and training through palliative care academic career development awards.

Moreover, the act would provide career incentive awards for nonphysician health clinicians who commit to practicing and teaching palliative care, as well as funding for training centers to provide short-term, intensive training to build both clinical and educational skills in caring for

We recommend policies that prevent the worsening of the burnout rate and support resilience.

people with serious illness. This is a significant need, as there are currently only six palliative care fellowship positions for advanced practice registered nurses, with three more in the planning stages; six graduate schools of nursing that have palliative care as an additional subspecialty focus; and eight programs that offer master's degrees or certificates in palliative care. Furthermore, post-master's level fellowship programs in specialty palliative care social work are few (approximately eight nationwide).²⁴

Second, we recommend policy solutions in addition to the Palliative Care and Hospice Education and Training Act that secure funding for advanced training in palliative care, including the expansion of Medicare graduate medical education funding for palliative medicine physician fellowships. A future with an adequate number of specialty palliative care clinicians rests upon an immediate and sustained increase of new workforce entrants across clinical disciplines. However, the current education and training infrastructure for certified palliative care team members is not sufficient to meet these needs. Existing specialty palliative care physician fellowships frequently rely on an unstable mix of institutional, philanthropic, and grant support, which limits their capacity for growth and may even threaten their long-term viability. Emerging palliative care fellowship programs for nursing, social work, and chaplaincy professionals face even steeper funding challenges, as well as a smaller pool of discipline-specific expert leaders to direct fellowships and provide training. Likewise, novel mechanisms are needed to provide federal funding for specialty-level graduate education (analogous to graduate medical education) and training to nonphysician palliative care professionals, given the evidence that interdisciplinary clinicians practicing specialty palliative care report a lack of education in the necessary knowledge and skills during their academic preparation.²⁵

Third, we recommend support for additional research into the workforce capacity and growth

of nonphysician palliative care specialist clinicians. Specialty palliative care is most effectively delivered by an interdisciplinary team, and policy solutions must address workforce needs across all disciplines. Even while specialty training is most prevalent among physicians, we project significant and worsening physician shortages over coming decades. We suspect that nursing, social work, and chaplaincy professionals will face more significant shortages. Thus, in addition to passage of the Palliative Care and Hospice Education and Training Act, we recommend support for additional research to accurately describe the size and composition of these disciplines and clearly define their workforce needs.

Fourth, we recommend that payment models for specialty palliative care continue to become less reliant on the services of physicians and advanced practice professionals currently eligible to bill under fee-for-service Medicare, and more focused on providing adequate support for a fully interdisciplinary team. Current data demonstrate that fewer than half of palliative care programs meet the Joint Commission's standard of funding a team of at least one physician, an advanced practice or other registered nurse, a social worker, and a chaplain. Many programs with a full interdisciplinary team cite the inability of nonphysician team members to secure fee-for-service payment, which leads to the solicitation of unstable institutional or charitable support to fund these positions.²⁶

Early payment policy progress is emerging in the Medicare Physician Fee Schedule through new codes that support some team-based care, but payment amounts remain too low to cover the cost of interdisciplinary teams. Proposals

for alternative payment models focused on palliative and serious illness care have been developed by the American Academy of Hospice and Palliative Medicine and the Coalition to Transform Advanced Care, which have some common elements.¹⁷ It is promising that the Centers for Medicare and Medicaid Services used elements of both proposals to design the Serious Illness Population components of its recently announced Primary Care First payment demonstration,²⁷ but participation is currently limited in geography, and it will be several years before its results can inform broader payment policy. Also, many commercial health plans have developed team-based payments for palliative care, but these payments are limited in most cases to providers in specific geographical regions serving specific health plan participants and are available only under proprietary contracts to large regional or national provider organizations.

Fifth, we recommend policies that prevent the worsening of the burnout rate and support resilience. Our results show relatively low burnout compared to other medical specialties²⁸ and only minor effects on the sustainability of the physician workforce. One protective factor supporting the low rate may be working within interdisciplinary teams of clinicians who share responsibility for care delivery. We are concerned that a projected worsening of the patient-to-physician ratio, combined with the erosion of interdisciplinary teams (due to the lack of both adequate training pipelines and sustainable payment models for palliative care delivery), will drive future increases in the burnout rate and thus a more substantial effect of that rate on the available workforce. ■

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NOTES

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