A Profile of New Hospice and Palliative Medicine Physicians

Results from the Survey of Hospice and Palliative Medicine Fellows Who Completed Training in 2018

By

George Washington University Health Workforce Institute

Leo Quigley, MPH

Dale Lupu, PhD MPH

Edward Salsberg, MPA FAAN

Shari Sliwa, MA

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Highlights

In 2018, for the third time, the George Washington University Health Workforce Institute (GWHWI) surveyed physicians completing training in hospice and palliative medicine (HPM). The 147 respondents to this survey, 50% of all 2017–2018 HPM fellows, are very satisfied with their new specialty and with their initial practice following their fellowship program. As with previous cohorts, respondent comments about the specialty were almost entirely enthusiastic, heartfelt, and optimistic about finding fulfillment in their work in the specialty.

Physicians entering HPM in 2018 came from a number of specialties; the most frequent prior specialties/subspecialties were: internal medicine (40%), family medicine (17.2%), pediatrics/pediatric subspecialties (11.1%), geriatrics (6.2%), and emergency medicine (5.5%). The remainder came from a variety of other specialties and subspecialties.

As in prior years, many 2017–2018 HPM fellows had substantial experience as practicing physicians prior to entering fellowship: 19.5% had 5 or more years of medical practice experience and 11.7% had more than 10 years of experience. These HPM graduates are entering HPM practice with skills and experience beyond the norm for most graduating fellows. However, the percentage with prior experience has decreased during the course of the three surveys.

The vast majority of new HPM physicians (82.4%) are providing HPM patient care services. New HPM physicians prefer positions in palliative care to those in hospice. Most of the new HPM physicians providing patient care services are working directly for hospitals or groups affiliated with hospitals (64.8%); only 8.6% are working directly for hospices. Of the respondents who reported hours worked by type of HPM activity, 71.3% reported spending 20 or more hours weekly in palliative care and 24.3% reported 20 or more hours weekly in hospice. (Some reported more than 20 hours in each setting.) The survey identified factors that appear to be contributing to graduates' preference for positions providing palliative care rather than those providing hospice services.

Most new HPM physicians were providing some services to patients who were "upstream"—that is, death was not imminent.

The job market appears generally good for graduates, although 29% reported some difficulty finding a satisfactory position, mostly related to a lack of jobs in desired locations. The national job market seems very strong, but there appear to be fewer job opportunities in some local areas around teaching hospitals. Jobs appear more plentiful in hospital-based palliative care, in geriatric and adult HPM, and for hospice medical directors. The job market appears to be more limited for nonhospital-based palliative care, pediatric HPM, and academic positions.

The graduates' average income was reported to be $209,000, a small increase compared with the 2016 average of $204,500. The average incomes for female and male HPM physicians were identical.

Although the new graduates are adding significantly to the national supply of HPM physicians, it's important to recognize that some new graduates are not providing HPM patient services and others may have completed the fellowship solely to improve their skills.

The 2018 survey of HPM fellows provides important insights about the current supply of and demand for HPM physicians. This information can inform the HPM community and policymakers about important workforce trends impacting the delivery of hospice and palliative care.

The views and findings in this report reflect the work of the GWHWI and do not necessarily reflect the views of American Academy of Hospice and Palliative Medicine (AAHPM) or George Washington University.

The GWHWI and AAHPM welcome comments and feedback about this report.

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Preface

The specialty of hospice and palliative medicine (HPM) is relatively new, having received formal recognition by the American Board of Medical Specialties and the Accreditation Council of Graduate Medical Education (ACGME) in 2006. The establishment of the specialty is happening at a time of transformation in healthcare delivery, as the nation looks to both increase access to and constrain the growth of the costs of health care in general.

To better understand issues related to the supply, demand, distribution, and use of HPM physicians, the George Washington University Health Workforce Institute (GWHWI) is collaborating with the American Academy of Hospice and Palliative Medicine (AAHPM) on studies of HPM physicians. One component is a survey of the physicians entering the specialty (ie, those who recently completed fellowship training). New physicians entering the field provide a picture of the future supply, including their demographic and educational backgrounds. The survey also provides a good picture of current demand and use based on the jobs new HPM physicians are offered and enter, their geographical distribution, their professional activities, and their experience in the job market.

This report presents key findings from the survey of the physicians who completed training in HPM in 2018 and comparisons with those who completed training in 2015 and 2016, when prior surveys of new HPM physicians were conducted.

This report presents a data portrait of the fellows who trained in 2017 and 2018. In different sections, the report presents findings about

- who the fellows are
- their experience prior to fellowship
- their experience during their fellowship
- their work immediately postfellowship
- their job search experience.

For the purposes of this report we use AAHPM's definitions, which describe HPM as follows:

- Palliative care focuses on improving a patient's quality of life by managing pain and other distressing symptoms of serious illness. Palliative care should be provided along with other medical treatments.
- Hospice is palliative care for patients in their last year of life. Hospice care can be provided in patients' homes, hospice centers, hospitals, long-term care facilities, or wherever a patient resides.
- Physicians who specialize in HPM work with other doctors and healthcare professionals, listen to patients and align treatments with what's important to them, and help families navigate the complex healthcare system.[A]

A Taken from palliativedoctors.org.

Survey Methods

The 2018 survey was based on the surveys used in 2015 and 2016. Changes were kept to a minimum to ensure comparability across the years. The survey design drew on the GWHWI team's previous experience of surveys of fellows completing training, which were designed to capture the unique aspects of the HPM specialty. In 2018, we added several questions regarding perceptions of hospice compared with palliative care. These questions were based on qualitative interviews conducted with 10 fellows to better understand why fewer graduates were accepting jobs in hospice compared with palliative care. An early draft of the survey was shared with AAHPM by the GWHWI research team and amended in response to comments.

According to the ACGME, there were 292 fellows in ACGME-accredited positions in 2018.[B] AAHPM worked with fellowship program directors to obtain email addresses for graduating fellows, yielding information for 256 fellows. GWHWI invited all 256 fellows to participate in the survey. An initial informational email was sent by AAHPM and quickly was followed by a formal invitation from GWHWI containing an individualized link generated through REDCap Web-based electronic data capture tools.[C] Several follow-up reminders were sent over a period of 6 weeks to maximize the number of responses. The REDCap tools enabled the GWHWI team to target reminders only to fellows who had not yet submitted complete responses and also enabled follow-up to clarify individual responses, when required.

The final responses were downloaded from REDCap for clean-up and analysis using Stata 15. Statistical tests also were performed in Microsoft Excel; the production of charts and graphs was done in Microsoft Excel or using online tools.

Overview of Respondents

In September and October of 2018, GWHWI surveyed physicians who had finished their fellowship earlier in the year. One hundred forty-seven (147) of the 256 responded, for a 57.4% response rate representing 50.3% of all 292 HPM fellows. This is comparable to the response rates for the 2015 and 2016 surveys (58% and 59%, respectively, of the fellows invited) and represented 46% and 49.6%, respectively, of all ACGME HPM fellows. Compared with the demographic and educational characteristics of all HPM fellows as reported by ACGME, the survey respondents were less likely to be doctors of osteopathic medicine (DOs), international medical school graduates (IMGs), or of African American ethnicity, but were similar in age, gender mix, and Hispanic ethnicity. None of the differences was statistically significant (**Exhibit 1**).

Exhibit 1 also shows how HPM respondents compared with ACGME data on all residents and fellows; for comparison, data on geriatrics, a similar specialty, is included. In general, HPM fellows are older, more likely to be female, and more likely to be a DO than non-HPM ACGME residents and fellows. It should be noted that the age of the survey respondents is collected after completion of training, whereas the age data reported by the ACGME represent the average age of all residents or fellows when in training.

B Taken from ACGME Data Resource Book, academic year 2017–2018.

C Taken from Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009 Apr;42(2):377–381

Exhibit 1: Comparison of Fellows Survey Respondents with ACGME Data[D]

	2018 GW survey respondents	All 2018 HPM fellows (ACGME)	ACGME geriatrics (internal medicine)	All ACGME residents and fellows	2015 GW HPM survey respondents	2016 GW survey respondents
Fellows	147	292	277	135,326	112	136
Mean age	36.5	35.4	34.1	30.7	37.9	37.3
Female	65%	64.3%	63.1%	43.9%	62.6%	73.5%
Male	35%	34.8%	36.9%	53.1%	37.4%	26.5%
IMGs	21.8%	25.7%	55.6%	25.9%	25.1%	19.1%
DOs (% of all fellows)	13.6%	19.2%	8.7%	12.7%	14.4%	19.1%
Hispanic	6.7%	6.8%	11%	6.6%	6.3%	5.6%
African American	3.4%	5.9%	5.9%	6.3%	6.8%	1.6%

Education, Citizenship Status, and Demographics of Fellows

This section presents data on the educational background, citizenship status, and demographics of all respondents.

Location and Type of Medical Education

Almost four-fifths of survey respondents were graduates of medical and osteopathic schools within the United States (USMGs). The remaining 22% were educated in other countries (**Exhibit 2**). This is a slight increase in IMGs compared with the 19% found in 2016 but is similar to the data reported in 2015. As noted above, the percentage of IMGs in HPM is less than the percentage found in other internal medicine subspecialties and general internal medicine.

Exhibit 2: Medical School Location (Q2.1 x Q2.2)

	What type of medical education do you have?				
	2018 respondents			*2015 respondents*	*2016 respondents*
Where did you attend medical school?	*Allopathic (MD) percent (N = 127)*	*Osteopathic (DO) percent (N = 20)*	*Total percent (N = 147)*	*Total percent*	*Total percent*
United States	74.8	0	78.2	77	81
Canada	0	0	0	1	0
Other	25.2	0	32	22	19
Totals	100	100	100	100	100

The great majority (89.1%) of the respondents reported that they were US citizens, either native born or naturalized, almost the same as in 2015 and slightly less than in 2016 (**Exhibit 3**). Three (2.2%) reported being permanent residents of the United States. The percentage of respondents reporting that they were noncitizen holders of H visas or J visas (5.1% and 3.6%, respectively) was greater than in 2016 but similar to 2015.

D Taken from ACGME Data Resource Book, academic year 2017–2018. Mean age is age at entry into training, except for surveyed respondents.

Exhibit 3: Citizenship Status (Q7.3)

What is your current citizenship status?	2018 percent (N = 137)	2016 percent	2015 percent
Native-born US citizen	79.6	83.3	80.2
Naturalized US citizen	9.5	12.1	11.3
Permanent resident	2.2	2.3	0.9
H-1, H-2, or H-3 temporary worker	5.1	2.3	4.7
J-1 or J-2 exchange visitor	3.6	0	2.8
Totals	**100**	**100**	**100**

Sex

Almost two-thirds of respondents (65%) were female (**Exhibit 4**). This is almost identical to the overall figure for all ACGME fellows in HPM at 64.3%. IMGs were slightly less likely to be male (33.3%) than USMGs (35.5%), but the difference was not significant.

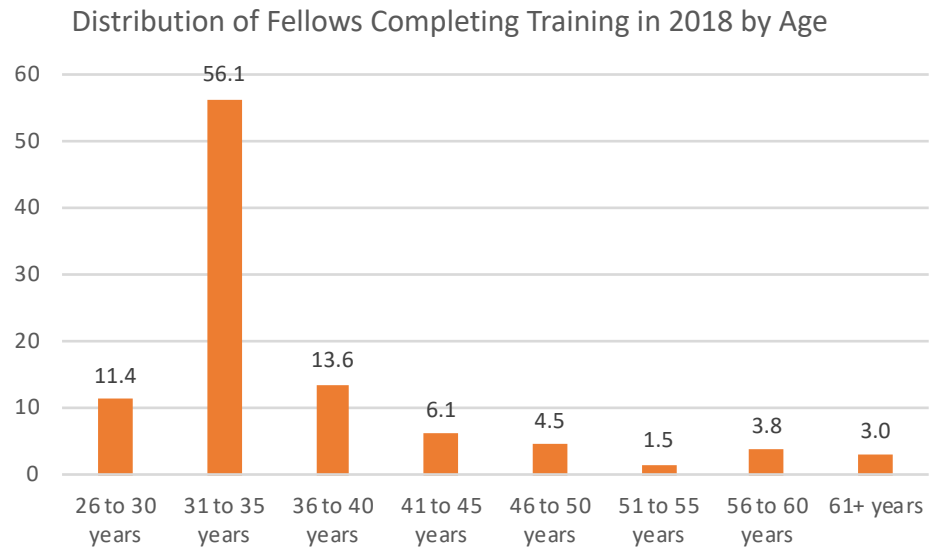
Exhibit 4: Respondents' Sex (Q7.1)

What is your sex?	USMG percent (N = 107)	IMG percent (N = 30)	Total respondents percent (N = 137)	All ACGME HPM (percent)
Female	64.5	66.7	65	64.3
Male	35.5	33.3	35	34.8
Totals	**100**	**100**	**100**	**99.1**

Age

The median age of fellows at the time of graduation from their HPM fellowship was 33 years. In 2016 and in the most recent survey, almost 20% of respondents reported being 40 years or older at the time of graduation, compared with 30% in 2015 (**Exhibit 5**). For the 2018 survey, the average age at the time of graduation was 36.5 years. On average, female respondents were older than male respondents, with the difference approaching statistical significance (37.5 years versus 34.7 years; $P = .070$). There were no significant age differences by USMG/IMG status. The older average age of physicians at the time of graduation compared with that for fellows in other subspecialty training programs is notable and statistically significant. Exhibit 1 shows that the average age upon entering training in geriatrics and oncology (both internal medicine subspecialties requiring completion of an initial primary residency) was 32 to 34 years, compared with 36 years for HPM fellows upon graduation. The large subgroup of HPM physicians who were 40 years or older at the time of graduation contributed to this difference.

Exhibit 5: Respondents' Age (from Q7.2)



Race/Ethnicity

IMGs were significantly more likely to be non-white than USMGs (73.3% versus 23.6%; *P* < .001; effect size, 1.03), mainly as a result of the greater numbers of individuals from the IMG group who self-identified as Asian (46.7% versus 13.2% for USMGs; *P* < .001; effect size = 0.85) and "other races" (26.7% versus 5.6%; *P* = .001; effect size=0.83; **Exhibit 6**).[E]

Exhibit 6: Respondents' Race* (Q7.4)

What is your race?	USMG percent (N = 106)	IMG percent (N = 30)	Total percent (N = 136)
White	76.4	26.7	65.4
Asian	13.2	46.7	20.6
Other	5.6	26.7	10.2
Black/African American	4.7	0	3.7
Totals	**100**	**100**	**100**

**Percentages are based on column totals.*

IMGs were more likely than USMGs to be Hispanic (13.3% versus 4.8%; **Exhibit 7**) but the difference was not statistically significant.

Exhibit 7: Hispanic/Latino Respondents (Q7.5)

Are you Hispanic or Latino?	USMG percent (N = 105)	IMG percent (N = 30)	Total percent (N = 135)
Non-Hispanic	95.2	86.7	93.3
Hispanic/Latino	4.8	13.3	6.7
Totals	**100**	**100**	**100**

E All effect sizes in this report are based on the Cohen's D measure.

Prior Medical Training and Experience

This section explores the medical training and practice background of the HPM fellows. This is particularly important information given that HPM can be entered from a number of specialties and subspecialties.

First GME

As seen in **Exhibit 8**, most of the HPM fellows (65.8%) took their first graduate medical education (GME) residency in internal or family medicine. A further 11.6% began in pediatrics and 5.5% began in emergency medicine. The "other" category included two fellows whose first GME residency was in obstetrics and gynecology, one fellow each from surgery and anesthesiology, one fellow who took a combined internal medicine and pediatrics residency, and one fellow who took a combined internal medicine and psychiatry residency.

IMGs were more likely than USMGs to have taken their first US GME residency in internal medicine (64.5% versus 42.6%) with the difference almost reaching statistical significance (*P* = .056).

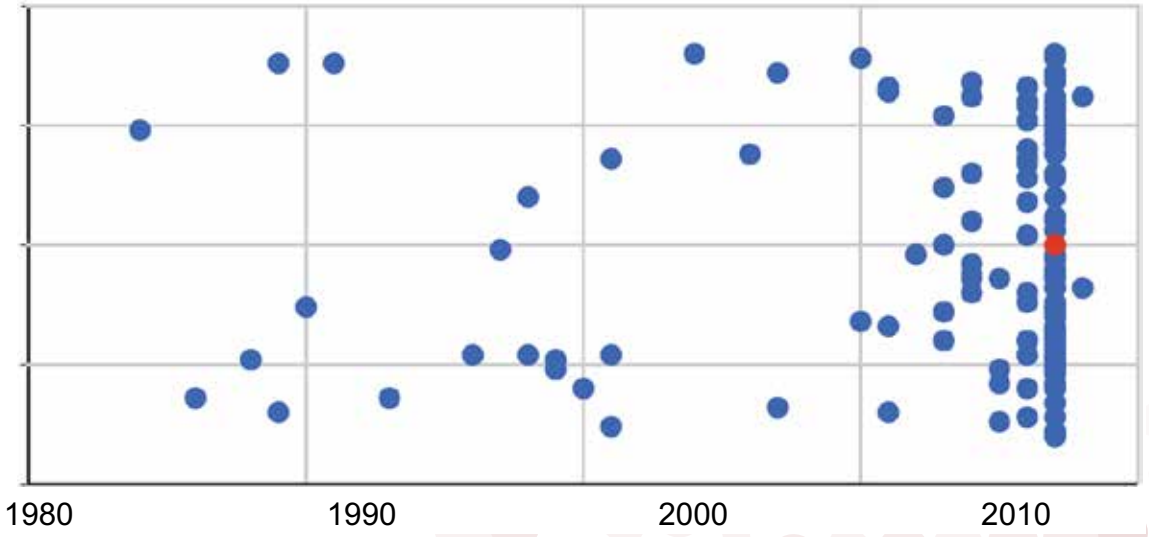
Exhibit 8: Earliest GME Specialty by US/IMG Status (Q2.3)

What was the specialty of your earliest US GME residency?	2018 USMG percent (N = 115)	2018 IMG percent (N = 31)	2018 total percent (N = 146)	2016 total percent (N = 136)	2015 total percent (N = 111)
Internal medicine	42.6	64.5	47.3	49.3	45.1
Family medicine	20	12.9	18.5	24.3	23.4
Other	14.8	6.5	13	8	8.1
Pediatrics	12.2	9.7	11.6	9.6	11.7
Emergency medicine	6.1	3.2	5.5	7.4	9.9
Psychiatry and neurology	4.3	3.2	4.1	1.5	1.8
Totals	**100**	**100**	**100**	**100**	**100**

Exhibit 9 provides a picture of the distribution of the years that respondents completed their first residency program. Those who completed their residencies most recently are on the right.

Exhibit 9: Date of Earliest GME (Q2.5)

In what year did you complete your earliest GME residency?*



** Red dot indicates the median value*

Additional Training Prior to HPM Fellowship

Twenty-seven (18.4%) of the fellows had taken more than one residency or fellowship before beginning their HPM fellowship (**Exhibit 10**).

Exhibit 10: Additional Residencies or Fellowships (Q2.6)

Did you undertake any further residency or fellowship prior to your HPM fellowship?	Frequency	Percent
Yes	27	18.4
No	120	81.6
Totals	**147**	**100**

Prior Medical Practice

Unlike in many other specialties, many of the HPM fellows had experience practicing medicine prior to entering the specialty. As indicated in **Exhibit 11**, 47 respondents—almost one-third (32.4%) of the fellows—had practiced medicine prior to their HPM training. This represents fewer fellows than seen in prior studies.

Exhibit 11: Prior Medical Practices (Q3.1)

Were you practicing medicine prior to your HPM fellowship?	2018 frequency	2016 percent	2015 percent
Yes	47 (32.4%)	38.5	40.5
No	98 (67.6%)	61.5	59.5
Totals	**145 (100%)**	**100**	**100**

These 47 respondents were practicing in numerous specialties: 57.5% of them were practicing in primary care (internal medicine, family medicine, or pediatrics) and 12.8% were in emergency medicine. In the "other" category were four respondents who had been practicing in psychiatry and neurology; two respondents from geriatrics; and one each from neonatology, medical oncology, hospital medicine, and palliative medicine with emergency medicine (**Exhibit 12**).

Exhibit 12: Prior Medical Practice Specialty (Q3.2)

In what specialty were you practicing?	2018 percent (N = 47)	2016 percent	2015 percent
Internal medicine	29.8	30.8	24.4
Other	21.3	9.6	17.7
Family medicine	14.9	26.9	20
Emergency medicine	12.8	15.4	22.2
Pediatrics	12.8	11.5	11.1
Obstetrics and gynecology	2.1	1.9	0
Anesthesiology	4.3	0	4.4
Surgery	2.1	3.8	0
Totals	**100**	**100**	**100**

As seen in **Exhibit 13**, 19.3% of the 145 respondents had 5 or more years of prior experience, including 11.7% who had 11 or more years of experience.

Exhibit 13: Years of Practice Prior to HPM Fellowship (Q3.7)

For how many years had you been practicing prior to your HPM fellowship?	Frequency	Percent of all respondents (N = 145)	Percent of those with prior practice (N = 47)
0	99	68.3	N/A
1	9	6.2	19.6
2	4	2.8	8.7
3	2	1.4	4.3
4	3	2.1	6.5
5 to 10	11	7.6	23.9
11 or more	17	11.7	37
Totals	**145**	**100**	**100**

Previous Specialty Prior to HPM Fellowship

Responses about prior medical training and practice enabled fellows to be grouped according to their previous specialty before their HPM fellowship. For fellows who had been in medical practice, their previous specialty was defined to be their prior practice specialty; for those who had not been in medical practice, their previous specialty was defined as their previous residency or fellowship prior to their HPM fellowship.

As seen in **Exhibit 14**, the dominant previous specialty for HPM fellows still was internal medicine (40%), with significant numbers from family medicine (17.2%) and smaller numbers from pediatrics (9.7%), geriatrics (6.2%), and emergency medicine and combined internal medicine and pediatrics (5.5% for each). Eight respondents (17% of those with prior practice) reported that they had been working as hospitalists.

Exhibit 14: Previous Specialty Prior to Fellowship by Years of Experience (Q3.2 etc.)

		Years of Experience before Fellowship*		
Previous specialty prior to fellowship	*All respondents* percent (N = 145)*	*0 years percent (N = 99)*	*1 to 4 years percent (N = 18)*	*5 or more years percent (N = 28)*
Internal medicine	40	75.9	15.5	8.6
Family medicine	17.2	76	8	16
Pediatrics	9.7	57.1	14.3	28.6
Other	6.9	50	10	40
Geriatric medicine	6.2	77.8	0	22.2
Internal medicine and pediatrics	5.5	100	0	0
Emergency medicine	5.5	25	25	50
Psychiatry and neurology	3.4	20	40	40
Oncology specialty	2.8	75	0	25
Pediatric subspecialty	1.4	50	0	50
Obstetrics and gynecology	1.4	50	0	50
Other	6.9	50	10	40
Totals	**100**	**68.3**	**12.4**	**19.3**

** "All respondents" shows column percent; "years of experience" shows row percent.*

Exhibit 14 also presents the number of years of experience providing patient care for each prior specialty. There were some notable differences in the fellows' years of medical experience when comparing by previous specialty prior to their HPM fellowship, with internal medicine and family medicine tending toward fewer years of experience and other specialties tending toward more years of experience. None of the eight fellows from internal medicine and pediatrics had prior medical practice experience. On the other hand, the vast majority of fellows from emergency medicine and psychiatry and neurology had several years of practice experience prior to their HPM fellowship.

To try to assess whether the HPM fellows were new to providing HPM or had prior experience and were, perhaps, pursuing the fellowship to improve their HPM skills and competencies, the survey included a specific question on whether they were providing HPM in their prior medical practice (**Exhibit 15**).

Exhibit 15: Experience Providing HPM (Q3.8)

In your prior position(s) were you providing any hospice or palliative care services?*	2018 frequency	2018 percent of all respondents (N = 147)	2016 percent of all respondents (N = 135)	2015 percent of all respondents (N = 111)
Yes	13	8.8	7.4	12.6

** This question only was asked of respondents who stated that they were practicing medicine prior to enrolling in their HPM fellowship (as reported in Exhibit 11).*

Fellowship Experience: Differences Between Hospice and Palliative Care Experiences

When selecting their fellowship program, the majority of fellows sought a program based on academic teaching or with a hospital-based palliative care focus (61.2% and 60.5% of respondents respectively; **Exhibit 16**). About one-third of fellows sought a hospice focus in fellowship, and one in five fellows sought pediatric palliative care experience.

Exhibit 16: HPM Fellowship Program Focus Sought (Q2.12)

Program focus	Percent	N*
Academic teaching	61.2	90
Hospital-based palliative care	60.5	89
Hospice	31.3	46
Pediatric palliative care	20.4	30
Research	19	28
Other	4.1	6
None of the above	15.6	23
Total responses to any part of this question	**100**	**147**

** Respondents could select more than one response. Question: "When you were applying to your HPM fellowship academic/teaching program, did you actively look for programs that included a focus on preparation for a career in the following (select all that apply)?"*

Fellows responding to the survey rated the quality of their palliative care fellowship experience higher than their hospice experience, with 87.5% of fellows rating their palliative care fellowship experience as "excellent" or "very good" compared with 69.9% for hospice (**Exhibit 17**).

Exhibit 17: Quality Rating of Hospice and Palliative Care Fellowship Experiences (Q2.15 and Q2.17)

How would you rate the quality of the experience you had during fellowship?	Hospice percent (N = 146)	Palliative care percent (N = 144)
Excellent	41.8	61.1
Very good	28.1	26.4
Good	20.5	9
Fair	6.8	3.5
Poor	2.7	0
Totals	**100**	**100**

Respondents described their hospice rotation experience quite differently from their palliative care rotation experience (**Exhibit 18**). They rated their palliative care rotation experience better than their hospice rotation experience in the areas of having many intellectually interesting cases (97.3% versus 59.2%), having many emotionally satisfying cases (91.1% versus 76.1%), having satisfying doctor-patient relationships (89.0% versus 74.6%), team-based care (93.2% versus 83.8%), continuity of relationships with patient/family (70.5% versus 54.2%), program innovation and growth (61.6% versus 23.2%), faculty for whom the specialty was a special calling (76% versus 65.5%), and faculty who encouraged a career in the setting (80.1% versus 66.9%). Conversely, they rated their hospice rotation experience better than their palliative care rotation on having good provider work-life balance (76.1% versus 67.8%), much time spent on administration (11.3% versus 21.2%), frequent overnight call (13.4% versus 19.2%), frequent weekend call (11.3% versus 24.7%), providers experiencing burnout (16.2% versus 34.2%), and fellows experiencing burnout (5.6% versus 23.3%).

Exhibit 18: Characteristics of Hospice and Palliative Care Rotation Experience (Q2.14)

Based on your experience during your HPM fellowship, were any of the following factors characteristic of your rotations? (Select all that apply)	Hospice percent (N = 142)	Palliative care percent (N = 146)
POSITIVE FACTORS		
Team-based care	83.8	93.2
Many emotionally satisfying cases	76.1	91.1
Providers with good work-life balance	76.1	67.8
Satisfying doctor-patient relationships	74.6	89
Faculty who encouraged a career in the setting	66.9	80.1
Faculty for whom the specialty was a calling	65.5	76
Many intellectually interesting cases	59.2	97.3
Continuity of relationships with patient/family	54.2	70.5
Program innovation and growth	23.2	61.6
NEGATIVE FACTORS		
Providers experiencing burnout	16.2	34.2
Frequent weekend call	11.3	24.7
Much time spent on administration	11.3	21.2
Fellows experiencing burnout	5.6	23.3
Frequent overnight call	13.4	19.2
Faculty who discouraged a career in the setting	3.5	4.8
Other	0.7	0.7

Similarly, respondents indicated that their exposure to palliative care during fellowship encouraged them to follow a career in palliative care more than their exposure to hospice encouraged them to follow a career in hospice: 82% of respondents felt strongly encouraged or encouraged to work in palliative care compared with only 44.8% for hospice (**Exhibit 19**).

Exhibit 19: Impact of Exposure to Hospice and Palliative Care During Fellowship (Q2.19 and Q2.21)

Did the exposure you had to hospice/palliative care during fellowship encourage you or discourage you from working in hospice/palliative care?	Hospice percent (N = 143)	Palliative care percent (N = 145)
Strongly encouraged me to work in hospice/palliative care	14.7	49.7
Encouraged me to work in hospice/palliative care	30.1	33.1
Neither encouraged nor discouraged me from working in hospice/palliative care	43.4	11.7
Discouraged me from working in hospice/palliative care	11.2	5.5
Strongly discouraged me from working in hospice/palliative care	0.7	0
Totals	**100**	**100**

In response to a question about careers in hospice and palliative care, fellows rated palliative care as being more in line than hospice with the statements "is intellectually stimulating" (93.3% versus 61.3%), "good fit with my interests" (92.6% versus 65.3%), "is suitable at an early-career point" (79.3% versus 58.9%), "has good income potential" (63% versus 41.1%), and "is a prestigious career path" (48.1% versus 22.6%). However, they rated palliative care and hospice almost identically on the statements "is suitable later in a career" (90.3% for both), "offers good work-life balance" (78.5% versus 79%), and "has lots of job opportunities" (54.8% versus 54%; **Exhibit 20**).

Exhibit 20: Agreement with Statements About Careers in HPM (Q6.16)

Statement	Hospice percent* (N = 124)	Palliative care percent* (N = 135)
Is suitable later in a career	90.3	70.4
Offers good work-life balance	79	78.5
Good fit with my interests	65.3	92.6
Is intellectually stimulating	61.3	93.3
Is suitable at an early-career point	58.9	79.3
Has lots of job opportunities	54	54.8
Has good income potential	41.1	63
Is a prestigious career path	22.6	48.1

** Respondents could select more than one response; percentages are of respondents to any part of this question.*

Post-Training Practice

One of the key goals of the survey of recent HPM fellows was to learn more about the work they will do after they complete their training. The survey included a number of questions on this topic, covering

- the type of work/tasks respondents will do
- what settings they will work in
- how many hours per week they will provide HPM services
- the population they will focus on
- the types of areas they will practice in.

Another goal was to learn about any systematic differences between HPM fellows, including in gender, IMG status, and the region in which they were practicing.

Principal Activity After Completion of Current Training Program

Of the 142 respondents who answered the question regarding their post-training plans, 82.4% were providing HPM-related patient care (60.6% said their principal clinical activity was exclusively in palliative medicine or hospice care and 21.8% said their clinical activities included a mix of HPM and non-HPM care) and 4.2% were in patient care that did not involve HPM (**Exhibit 21**). Three (2.1%) were undertaking further training; one (0.7%) reported an educator role as their principal activity, although 37 of 53 respondents who reported roles in addition to their main activity said the additional role was as an educator (**Exhibit 22**), mostly working for fewer than 10 hours per week (**Exhibit 23**). Included among those who responded "other" were two respondents who were completing master's degrees and one each reporting a fellowship in oncology, mixed HPM patient care and administration, patient care education, primary care with a focus on complex cases and transitions of care, combined research and clinical care with moonlighting at a hospice, an exclusively nonpalliative care role with expectations of some palliative care involvement in the near future, and seeking a family medicine position with a view to setting up a hospice.

Exhibit 21: Principal Post-Training Activity (Q4.3)

What best describes your principal activity now that you have completed your HPM fellowship program?	Percent (N = 142)	Percent* (N = 13)
Patient care—exclusively HPM	60.6	53.8
Patient care—mixed HPM and non-HPM	21.8	38.5
Other	7.0	7.7
Patient care—exclusively non-HPM	4.2	0.0
Additional subspecialty training or fellowship	2.1	0.0
Researcher	2.1	0.0
Temporarily out of medicine	1.4	0.0
Educator	0.7	0.0
Totals	**100**	**100**

** These figures are for those doing palliative care before training.*

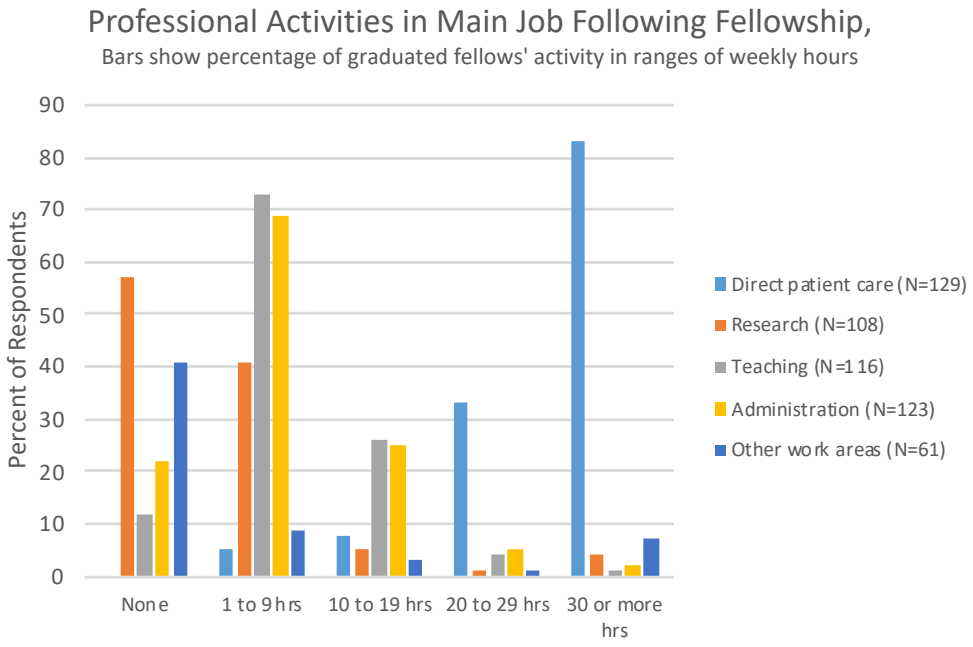
The survey also asked if they did other activities in addition to their principal HPM activity. Fifty-three of 136 respondents (39%) indicted they did another activity (Exhibit 22).

Exhibit 22: Other Activity Type (Q4.6)

What best describes your other activity (select only one)?	Frequency	Percent
Other	8	15.1
Educator	37	69.8
Patient care—exclusively HPM	4	7.5
Patient care—mixed HPM and non-HPM	1	1.9
Researcher	3	5.7
Totals	**53**	**100**

The survey also included a question about how many hours per week respondents were providing or planned to provide patient-care and nonpatient care activities (Exhibit 23). Eighty-three (83) of the 129 respondents (64.3%) who gave information about jobs they had commenced or accepted indicated they would be spending 30 or more hours in direct patient care, with a further 33 (25.6%) expecting to spend 20 to 29 hours in direct patient care. Conversely, only four out of 108 (3.7%) indicated that they would be spending 20 or more hours in research, one out of 116 (0.9%) in teaching, and two out of 123 (1.6%) in administration.

Exhibit 23: Hours in Patient Care and Nonpatient Care Activities (Q5.10)



Female respondents were almost equally as likely as male respondents to be engaged in research (42.9% versus 45.5%; not significant) and teaching (91.8% versus 89.2%; not significant). The differences between IMGs and USMGs in their involvement in teaching (81.3% versus 92.9%), research (62.5% versus 41.3%), and administration (89.5% versus 82.6%) were not statistically significant. There were no significant differences in activity by census region. A map of US census regions is provided in Appendix 2.

The primary reasons given for working outside of HPM (**Exhibit 24**) were "personal interest in non-HPM field" (24 responses) and "maintenance of skills/expertise" (16 responses).

Exhibit 24: Reasons for Some Work Being Outside of HPM (Q5.33)

Reason for some work outside of HPM (may provide more than one)	Frequency
Personal interest in non-HPM field	24
Maintenance of skills/expertise	16
Not enough full-time equivalent jobs available in my location to be 100% HPM focused	8
Required by my employer to work in HPM	5
Financial	4
Other reason	4

Practice Setting

Among respondents who provided information about a job they had commenced or accepted in direct patient care (N = 128), most (83; 64.8%) reported that their primary practice would be in a hospital or hospital-affiliated practice. Another eight (6.3%) reported that they would be working in group practices and 11 (8.6%) reported that they would be working in a hospice setting (**Exhibit 25**).

Exhibit 25: Patient Care Setting (Q5.15)

Considering the practice where you provide the MOST hospice and palliative care service, which best describes the practice type?	Frequency	Percent
Hospital: working directly as employee of hospital	53	41.4
Hospital-affiliated practice owned wholly or in part by a hospital/ foundation	30	23.4
(All hospital practice types)[F]	*(83)*	*(64.8)*
Hospice	11	8.6
Medical school	8	6.3
Veterans Affairs setting	7	5.5
Multispecialty group practice	6	4.7
I am not providing any hospice or palliative care services	4	3.1
Other	4	3.1
Single-specialty group practice	2	1.6
Health maintenance organization/managed care organization	2	1.6
Community health center	1	0.8
Totals	**128**	**100**

Region 4 (the West) had no respondents working in hospice settings, compared with 13.4% of respondents in all other areas combined, a difference that approached statistical significance (*P* = .066; Exhibit 25). There were no other significant differences by gender, USMG/IMG status, or region.

Relationship Between Prior Practice and New Practice

Thirty-nine of the 47 fellows who had been in medical practice before their fellowship provided information about their previous and future practice settings (**Exhibit 26**). As in 2015 and 2016, none of the respondents reported previous practice in hospice care. A little more than one-half of fellows (22 out of the 39 respondents; 56.4%; about 15% of all respondents) returned to practices similar to those they were in before their fellowship. The fellowship led to no gain or loss in the number of fellows practicing in a hospital practice, a net gain of five fellows for hospice care, a net loss of two fellows from nonhospital practice, and a net loss of three fellows from all other practice types.

F This line is the sum of the two lines above and does not contribute to totals.

Exhibit 26: Comparison of Past Versus Future Patient Care Settings (Q3.4 x Q5.15)

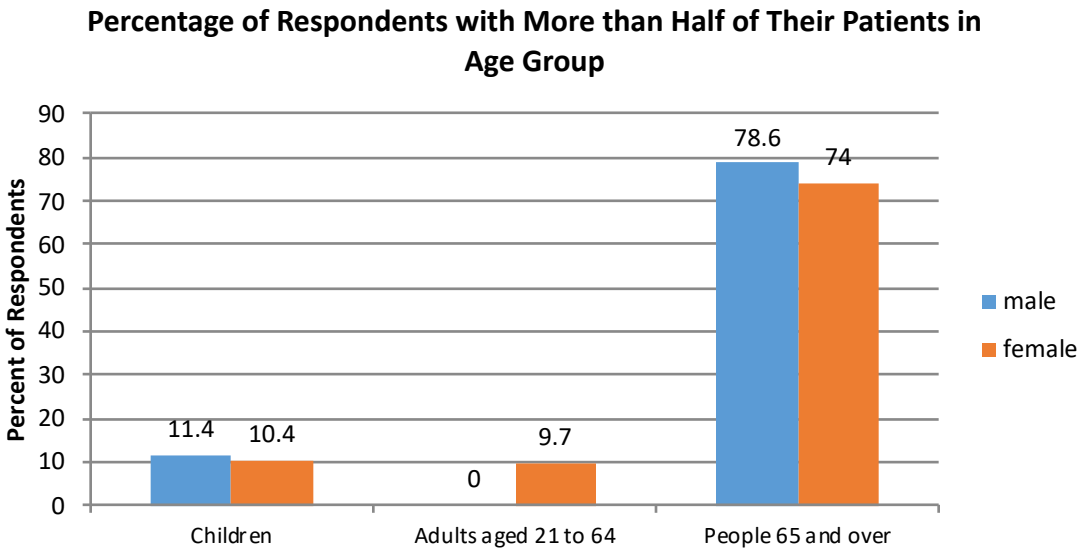
Prior and future practice type reconciliation	Future practice description (Q5.15)				
Prior practice description (Q3.4)	*Nonhospital practice*	*Hospital practice or employee*	*Hospice*	*Other*	*Total*
Nonhospital solo or group practice	4	2	1	0	**7**
Hospital affiliated practice or employee	0	13	3	4	**20**
Hospice	0	0	0	0	**0**
Other	1	5	1	5	**12**
Total	**5**	**20**	**5**	**9**	**39**
Net gain (loss)	**(2)**	**0**	**5**	**(3)**	**0**

Note: Only physicians who had a prior practice are included in exhibit.

Age of Patients to Be Served

Ninety of 119 respondents (75.6%) reported that they would spend more than 50% of their time treating patients older than 65 years. Eleven (10.8%) reported that they would spend more than 50% of their time with children; 52 (51%) reported that they would spend none of their time with children; and 38 (37.3%) reported that they would spend some but not more than 25% of their time with children. Only seven (6.2%) reported that they would spend more than 50% of their time with adults aged 21 to 64 years, and none reported spending more than 75% of their time with this age group. IMGs were more likely than USMGs to be treating patients older than 65 years, with the difference approaching statistical significance (94.5% versus 74.4%; *P* = .070). There were no statistically significant differences in the age of patients to be cared for by respondents' region or sex. (See **Exhibit 27**.)

Exhibit 27: Age of Patients Respondents Expect to Serve in Their Practice (Q5.31)



Density of Practice Area

Among respondents who provided information about jobs they had commenced or accepted in patient care, the vast majority (80%, compared with 82% in 2016 and 90% in 2015) planned to work in a major city or suburban area. Twelve percent (12.3%) of fellows planned to work in small cities and 7.6% planned to work in rural or semirural areas. There were several differences by region: respondents in

the West were significantly more likely than those in other regions to be located in suburban areas (20.8% versus 3.61%; *P* = .013; effect size = 0.53) and those in the South were significantly more likely to be working in medium-sized cities (58.1% versus. 29.0%; *P* = .008; effect size = 0.63). Respondents in the Northeast were significantly more likely than those from other regions to be located in semirural areas (11.1% versus 1.3%, *P* = .049; effect size = 0.56). There were no significant differences in practice location by IMG status or between male and female respondents. (See **Exhibit 28**.)

Exhibit 28: Population Density of Practice Location (Q5.5)

Which best describes the demographics of the principal area in which you are/will be practicing?	Frequency	Percent
Large city (population more than 1 million)	45	34.6
Medium city (population more than 250,000 but less than 1 million)	46	35.4
Small city (population more than 50,000 but less than 250,000)	16	12.3
Suburb of large or medium city	13	10
Semirural (population more than 10,000 but less than 50,000)	5	3.8
Rural	5	3.8
Totals	**130**	**100**

Hours Worked: How Many and Where

Exhibits 29 and **30** show the distribution of total hours of work reported by respondents. The vast majority (81.6%) reported working 40 to 59 hours per week, 14 (11.2%) reported working less than 40 hours per week, and the remaining 7.2% reported working 60 or more hours per week.

Exhibit 29: Number of Paid Hours per Week (Q5.6)

Paid weekly hours	Frequency	Percent
10 to 19 hours	1	0.8
20 to 29 hours	6	4.8
30 to 39 hours	7	5.6
40 to 49 hours	77	61.6
50 to 59 hours	25	20
60 or more hours	9	7.2
Totals	**125**	**100**

Fourteen respondents (10.9%) reported working part time in arrangements ranging to as little as 20% to 29% of full-time equivalent, with one respondent indicating arrangements that could not be characterized in terms of weekly hours.

Although palliative care services in hospitals tend to be provided by HPM physicians working more than 20 hours per week, for most other settings, the HPM physicians providing services often are doing so on a part-time basis of fewer than 20 hours per week. This is particularly true for services provided in freestanding hospice facilities, home palliative care facilities, and nursing homes, where only a handful of HPM physicians reported working more than 10 hours per week (Exhibit 30). However, it is worth noting that in this survey, seven new HPM physicians reported working more than 20 hours per week in home hospice.

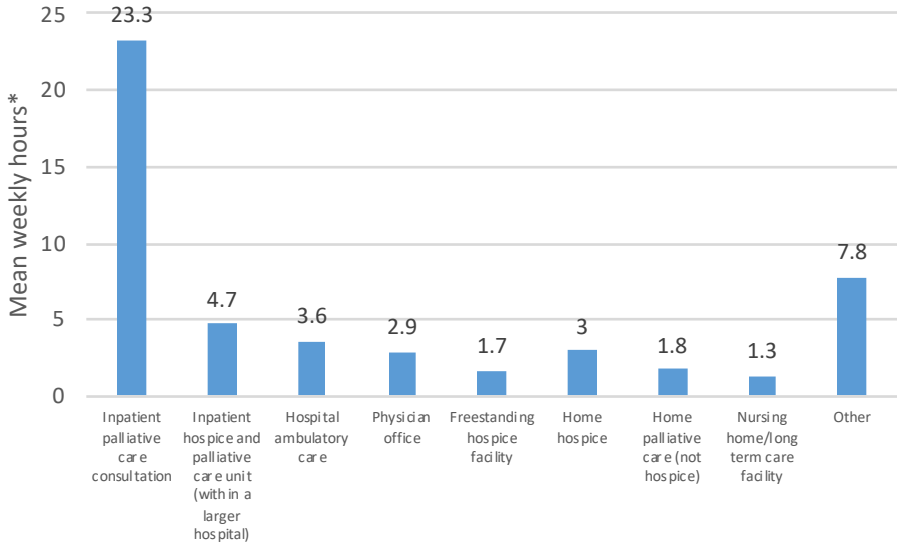
Exhibit 30: Breakdown of Hours Spent at Different HPM Practice Settings (Q5.29)

Hours per week / *HPM practice setting*	Frequencies* None	*1 to 10*	*11 to 20*	*21 to 40*	*More than 40*
Inpatient palliative care consultation	21	16	10	51	22
Inpatient hospice and palliative care unit (within a larger hospital)	75	18	2	6	3
Hospital ambulatory care	73	21	6	7	0
Physician office	82	14	3	3	2
Freestanding hospice facility	90	8	4	1	1
Home hospice	83	13	1	5	2
Home palliative care (not hospice)	89	11	1	2	1
Nursing home/long-term care facility	87	12	2	0	1
Other sites	57	2	2	2	7

** Frequencies represent the number of respondents who indicated that number of hours in each setting.*

The individual responses regarding hours worked per week by practice setting can be compiled into a composite picture of overall hours worked by setting. As **Exhibit 31** shows, and consistent with previous years, the most hours were spent in inpatient palliative care consultation, reflecting the preponderance of respondents working in palliative care as opposed to hospice care.

Exhibit 31: Composite of Hours Spent at Different HPM Practice Settings (Q5.29)



** Mean hours are calculated using midpoints of each hours range.*

Comparison of Fellows Going into Hospice Versus Palliative Care Practice

The questions on the survey regarding hours per week providing HPM services and the setting for providing care make it possible to identify physicians who primarily will be providing palliative care services as opposed to physicians primarily providing hospice services. The following section explores a variety of characteristics of these two groups of physicians.

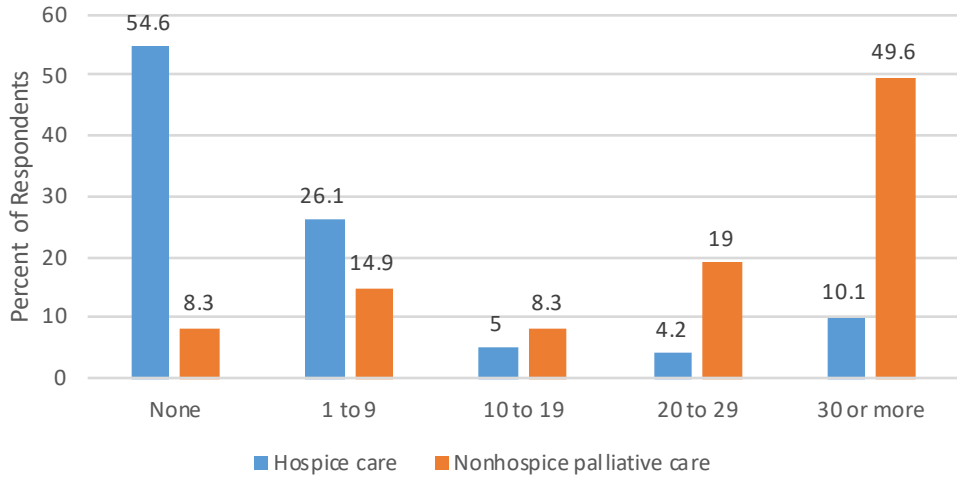
Of the 122 physicians who reported their weekly hours spent on patient care activities, four (3.3%) reported spending more than 20 hours per week on both palliative medicine and hospice care, 79 (64.8%) indicated they were spending more than 20 hours per week on palliative medicine alone, and

13 (10.3%) reported spending 20 hours or more on hospice care alone. This compares with the 24% in 2016 and 13% in 2015 who reported working 20 hours or more on hospice. Twenty-six (21.3%) were not spending more than 20 hours per week on either hospice or palliative care. One-half (50%) were working in hospitals as employees. Some of these physicians may be providing both HPM and non-HPM services. (See **Exhibits 32** and **33**.)

Exhibit 32: Hours in Hospice or Nonhospice Care by Principal Practice Setting (Q5.28 x Q5.15)

Principal practice setting	Fellows with indicated number of weekly hours in patient care				
	20+ palliative care percent (N = 79)	*20+ hospice percent (N = 13)*	*Both 20+ percent (N = 4)*	*Neither percent (N = 26)*	*Total percent (N = 122)*
Single or multispecialty group practice (N = 7)	71.4	0	0	28.6	**100**
Hospital-affiliated practice owned wholly or in part by a hospital or hospital foundation (N = 30)	83.3	6.7	0	10	**100**
Hospital: working directly as employee of hospital (N = 52)	69.2	1.9	3.8	25	**100**
Hospice (N = 11)	0	81.8	9.1	9.1	**100**
Health maintenance organization/managed care organization (N = 2)	100	0	0	0	**100**
Medical school (N = 8)	50	0	0	50	**100**
Veterans Affairs setting (N = 7)	71.4	14.3	0	14.3	**100**
Community health center (N = 1)	0	0	0	100	**100**
Other (N = 4)	50	0	25	25	**100**
Total (N = 122)	**64.8**	**10.7**	**3.3**	**21.3**	100

Exhibit 33: Percent of Respondents by Hours in Hospice or Nonhospice Care (Q5.28)



The information the fellows provided about the number of hours they were spending (or expected to spend) on hospice or palliative care practice (**Exhibit 34**) opened up the possibility of assessing differences between those whose work was mainly in hospice care and those who were mainly delivering palliative care. These differences are assessed in a separate report from GWHWI to AAHPM.

With the exception of those with backgrounds in emergency medicine, psychiatry and neurology, and oncology, physicians trained in other specialties are more likely to practice more than 20 hours per week in palliative care than hospice. Interestingly, three of the four fellows who had trained in oncology were practicing more than 20 hours per week in hospice.

Exhibit 34: Hours Spent in Hospice or Nonhospice Care by Last Specialty Before Fellowship (Q.5.28 x Q3.2 etc.)

Last specialty prior to HPM fellowship	Fellows with indicated number of weekly hours in patient care (percentages are by row)				
	20+ palliative care	*20+ hospice*	*Both 20+*	*Neither*	*Total*
Emergency medicine (N = 5)	20	20	0	60	**100**
Family medicine (N = 23)	65.2	17.4	4.3	13	**100**
Geriatric medicine (N = 8)	62.5	0	0	37.5	**100**
Internal medicine (N = 49)	71.4	8.2	4.1	16.3	**100**
Internal medicine and pediatrics (N = 8)	87.5	0	0	12.5	**100**
Obstetrics and gynecology (N = 2)	50	0	50	0	**100**
Pediatrics (N = 11)	81.8	0	0	18.2	**100**
Pediatric subspecialty (N = 2)	50	0	0	50	**100**
Psychiatry and neurology (N = 4)	0	25	0	75	**100**
Oncology specialty (N = 4)	25	75	0	0	**100**
Other (N = 6)	66.7	0	0	33.3	**100**
Totals (N = 122)	**64.8**	**10.7**	**3.3**	**21.3**	100

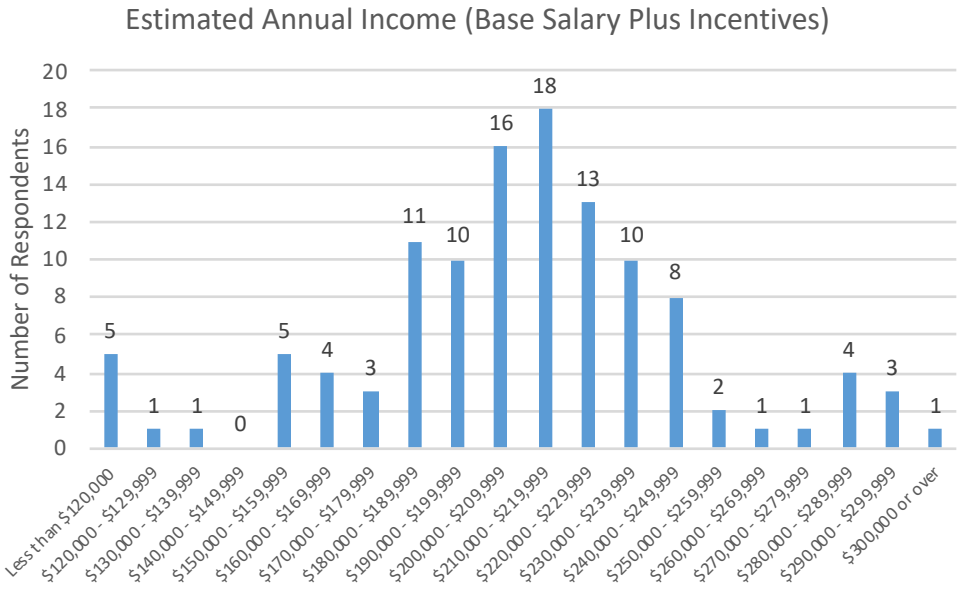
The Marketplace: Income and the Job Search Experience

Expected Income for Full-Time Practice[G]

Respondents who had accepted job offers, were working, or who planned to work full time who reported their total (base plus incentive) income (N = 117) expected to earn incomes ranging from less than $120,000 (six respondents; 6.7%) to more than $300,000 (one respondent; 1.1%). The most frequently reported income categories were $210,000 to $219,999 (15 respondents; 16.5%) and $200,000 to $209,999 (13 respondents; 14.3%). The mean income was around $207,500 (compared with $204,000 in 2016) and the median was in the $210,000 to $219,999 range. The difference between the median and the mean suggests an income distribution slightly skewed toward lower incomes, as **Exhibit 35** seems to confirm.

G The 2018 and 2016 income summaries that follow are based on respondents who provided income information and said they were working full time. Income information was reported in $10,000 ranges and average income is calculated assuming actual incomes were at the midpoints of the reported ranges. Income averages for 2015 were calculated from $25,000 income ranges and included part-time work, so comparisons with the 2015 figures should be approached with caution.

Exhibit 35: Distribution of Expected Income in 2018 (Q5.12)



Exhibits 36 through **44** show the differences in income by the density of the practice location, type of activity, practice setting, practice focus, years of experience, census region, sex, and location of medical education.

The highest average income was in rural areas ($235,000); the lowest was in small cities ($195,000; see Exhibit 36).

Exhibit 36: Expected Average Income by Density of Practice Location (Q5.12 x Q5.5)

Density of principal practice setting	Mean income	Percent of respondents (N=114)
Large city (population more than 1 million)	$212,500	31.6
Medium city (population more than 250,000 but less than 1 million)	$207,000	36.8
Suburb of large or medium city	$222,000	11.4
Small city (population more than 50,000 but less than 250,000)	$195,000	13.2
Semirural (population more than 10,000 but less than 50,000)	$218,500	2.6
Rural	$235,000	4.4
Totals	**$209,000**	**100**

Exhibit 37: Total Gross Income by Type of Activity (Q5.12 x Q4.3)

Principal activity now that you have completed your HPM fellowship program	Mean income	Percent of respondents (N = 117)
Patient care—exclusively palliative medicine/hospice	$211,000	63.2
Patient care—exclusively nonpalliative medicine/hospice	$263,000	4.3
Patient care—mixed palliative medicine/hospice and nonpalliative medicine/hospice	$207,000	23.1
Researcher	$165,000	1.7
Additional subspecialty training or fellowship	$155,000	1.7
Other	$183,500	6

Similar to the 2016 results and in contrast to 2015, fellows going to work in hospices had the lowest expected incomes ($208,500); those working in nonhospital practices had the greatest expected incomes ($214,000; see **Exhibit 38**).

Exhibit 38: Expected Average Income by Practice Setting (Q5.12 x Q5.15)

Type of principal practice setting	Mean income	Percent of Respondents (N = 114)
Nonhospital group practice	$214,000	7.1
Hospital-affiliated practice or employee	$212,000	65.5
Hospice	$208,500	8
Other	$209,000	19.5
Totals	**$209,000**	**100**

The difference in average income between those fellows spending most of their time working in a hospice and those spending most of their time in nonhospice palliative care was $2,500 ($209,500 versus $212,000; 1.2%; **Exhibit 39**). Those with less than 20 hours in both hospice and palliative care had a lower average income ($194,000). Those with more than 20 hours in both hospice and palliative care had incomes closer to those working mainly in hospice or palliative care ($210,000).

Exhibit 39: Expected Average Income by Patient-Care Focus (Q5.12 x Q5.28)

Main practice focus	Mean income	Percent of respondents (N = 107)
Nonhospice palliative care 20+ hours	$212,000	68.2
Hospice care 20+ hours	$209,500	10.3
Both 20+ hours	$210,000	3.7
Neither 20+ hours	$194,000	17.8
Totals	**$209,000**	**100**

As in previous years, there was no clear pattern of income by years of medical experience (**Exhibit 40**). Those with 5 or more years in practice had higher average incomes than those without any prior medical experience (around $214,500 versus $210,500). Those with limited experience had the lowest expected incomes (about $189,500).

Exhibit 40: Expected Average Income by Years of Experience (Q5.12 x Q3.7)

Years of medical experience	Mean income	Percent of respondents (N = 117)
0 years	$210,500	70.1
1 to 4 years	$189,500	12
5 or more years	$214,000	17.9
Totals	**$209,000**	**100**

This year, region 4 (West, $222,000) reported the greatest average expected income, followed by region 1 (Northeast, $206,500). Region 3 (South, $198,000) reported the lowest average income.

Exhibit 41: Expected Average Income by Census Region (Q5.12 x Q5.4)

Census region	Mean income	Percent of respondents (N = 112)
Northeast	$206,500	28.6
Midwest	$210,000	20.5
South	$198,000	29.5
West	$222,000	21.4
Totals	**$209,000**	**100**

Unlike in 2015 and 2016, male respondents no longer reported greater average incomes than female respondents, with both earning $209,000 (**Exhibit 42**).

Exhibit 42: Expected Average Income by Sex (Q5.12 x Q7.1)

Sex	2018 percent of respondents (N = 113)	2018 mean income	2016 income	2015 income
Male	36.3	$209,000	$222,500	$192,200
Female	63.7	$209,000	$197,000	$177,500
Totals	**100**	**$209,000**	**$204,500**	**$183,400**

The average income of US medical school graduates increased 3.5% between 2016 and 2018. On the other hand, the average income of IMGs decreased nearly 4% during that period. Nevertheless, as in 2016 (but unlike in 2015), US medical graduates had lower expected incomes than IMGs but the difference was small ($208,500 versus $210,000).

Exhibit 43: Expected Average Income by USMG/IMG Status (Q5.12 x Q7.3)

USMG/IMG status	2018 percent of respondents (N = 117)	2018 mean income	2016 mean income	2015 mean income
USMG	77.8	$208,500	$201,500	$185,200
IMG	22.2	$210,000	$218,000	$173,000
Totals	**100**	**$209,000**	**$204,500**	**$182,700**

Comparing specialties reported by more than five respondents, physicians who had specialized in family medicine, geriatric medicine, and internal medicine and pediatrics reported the greatest mean income ($214,000, $212,500, and $211,500, respectively) followed by internal medicine physicians ($206,500). Pediatrics physicians trailed at $185,000 (**Exhibit 44**).

Exhibit 44: Expected Average Income by Last Specialty Before HPM Fellowship (Q5.12 x Q3.2 etc.)

Last specialty before HPM fellowship	2018 mean income	Percent of respondents (N = 117)
Internal medicine	$206,500	39.3
Family medicine	$214,000	21.4
Emergency medicine	$232,500	3.4
Pediatrics	$187,000	8.5
Psychiatry and neurology	$145,000	2.6
Geriatric medicine	$212,500	6.8
Internal medicine and pediatrics	$211,500	6.8
Other	$228,000	11.1
Totals	**$209,000**	**100**

Job Market Experiences and Perceptions

A series of questions on the survey was designed to assess the balance between supply and demand for hospice and palliative care physicians (that is, whether there are many jobs or few jobs for recent graduates). Some of these questions are subjective, reflecting the expectations and perceptions of the new HPM physicians. These perceptions are informative, especially because new graduates may influence the way HPM is viewed by other trainees considering entering the specialty. Although no single question can provide a clear picture of the marketplace, a series of questions tracked over time can provide a good picture.

We tested for differences in the job market experiences of graduating fellows across three key categories:

- sex
- USMG/MG status
- census regions (Northeast versus Midwest versus South versus West).

We found the following with respect to the 124 fellows who reported their job search experiences.

Difficulty Finding a Satisfactory Position

Fellows' experiences finding a satisfactory position generally were good: 88 of 124 (71%) reported no difficulty, the same as in 2016 and a little less than the 81% in 2015, whereas 30 (29%) reported difficulty finding a satisfactory practice position (**Exhibit 45**).

Exhibit 45: Difficulty Finding a Satisfactory Position (Q6.4)

Did you have difficulty finding a practice position involving HPM that you were satisfied with?	2018 percent of respondents (N = 124)	2016 percent	2015 percent
Yes	29	29	19
No	71	71	81
Totals	**100**	**100**	**100**

As in 2015 and 2016, we found no statistically significant difference between male and female fellows' reports of difficulty finding a position or between IMG and USMG fellows or across census regions.

Reasons for difficulty (Q6.5; **Exhibit 46**). Among the 36 fellows who reported difficulty finding a satisfactory position, the most frequently cited reasons were lack of jobs/practice opportunities in desired locations (25; 69.4% of those who gave an answer to this question could indicate more than one reason). Also cited were overall lack of jobs/practice opportunities, lack of jobs/practice opportunities in desired practice setting, and inadequate salary/compensation offered (12 for each; 33.3%). On a related question regarding the most important reason for having a difficult time, the lack of jobs/practice opportunities in desired locations was cited as the single most important reason for difficulty by 12 (33.3%) of the 36 respondents.

Exhibit 46: Reasons for Difficulty (Q6.5)

Reason for difficulty	Percent* (N = 36)	Percent† (N = 129)
Lack of jobs/practice opportunities in desired locations	69.4	19.4
Overall lack of jobs/practice opportunities	33.3	9.3
Lack of jobs/practice opportunities in desired practice setting	33.3	9.3
Inadequate salary/compensation offered	33.3	9.3
Lack of expert HPM senior mentorship available	25	7
Undesirable mix of clinical activities	22.2	6.2
Lack of jobs/practice opportunities that meet visa status requirements	5.6	1.6
Lack of leadership opportunities	5.6	1.6
Other	11.1	3.1

** Percentage is based on number of respondents who reported difficulty finding a satisfactory position. Respondents could indicate more than one reason.*

† Percentage is based on all job seekers.

We found no statistically significant difference in reasons for difficulty finding a position between male and female fellows, but the difference between the number of male fellows and female fellows that cited inadequate salary as the main reason for difficulty approached significance (58.3% of males versus 79.2% of females; *P* = .058). Respondents in the West region were significantly less likely than those from all other regions to cite lack of jobs/practice opportunities in desired locations as the main reason for difficulty (25% versus 82.1%; *P* = .039; effect size = 0.50). There was no significant difference by IMG status in reasons for difficulty finding a satisfactory practice position.

Changing plans as a result of limited practice opportunities (**Exhibit 47**). Twenty-six fellows (20.8% of those who had looked for jobs) reported that they had changed their plans because of limited practice opportunities, which was similar to 2016 (20%) and 2015 (19%). IMGs were much more likely than USMGs to report changing plans (39.3% versus 15.5%; *P* = .015; effect size = -.60). Those in the West region were significantly less likely that those in other regions to report having to change plans (4% versus 24.2%; *P* = .024; effect size = 0.51). There was no significant different between male and female respondents (15.9% versus 23.8%; not significant).

Exhibit 47: Changing Plans Because of Limited Practice Opportunities (Q6.8)

Did you have to change plans due to limited practice opportunities?	2018 percent of respondents (N = 125)	2016 percent	2015 percent
Yes	20.8	20	19
No	79.2	80	81
Totals	**100**	**100**	**100**

Number of job applications (**Exhibit 48**). Fellows' reports of the number of job applications they had completed varied widely from one to more than 10; the vast majority of respondents (104; 83.2%) applied for up to five jobs and 12% applied for six or more jobs. Six (4.8%) applied for no jobs, although they reported having searched for jobs.

Exhibit 48: Number of Job Applications (Q6.9)

Number of job applications made	Frequency	Percent*
None	6	4.8
1	21	16.8
2	32	25.6
3	24	19.2
4	14	11.2
5	13	10.4
6–10	12	9.6
More than 10	3	2.4
Totals	**125**	**100**

** Percentage is based on those who answered that they had looked for a job*

Fellows in the Northeast were significantly more likely than those in other regions to apply for six or more jobs (22.6% versus 7.9%; *P* = -.047; effect size = .39) but there were no other significant differences by region in jobs applied for. IMGs were more likely than USMGs to apply for six or more jobs (20.7% versus. 9.0%); but, as in 2016, the difference was not statistically significant. More male than female fellows applied for six or more jobs (18.2% versus 8.8%) but again, the difference was not statistically significant.

Number of job offers (**Exhibit 49**). As in 2015 and 2016, the great majority of fellows (78.4%) reported receiving one to three job offers. Seven reported receiving no job offers but, as noted previously, only one of these had submitted any job applications.

Exhibit 49: Number of Job Offers (Q6.10)

Number of job offers received	2018 percent of respondents (N = 125)	2016 percent	2015 percent
None	5.6	1	1.3
1	23.2	30.8	40.8
2	34.4	22.1	18.4
3	20.8	26.9	26.3
4	11.2	11.5	6.6
5	2.4	3.8	5.3
6 or more	2.4	3.8	1.3
Totals	**100**	**100**	**100**

There were no significant differences in the number of job offers received between male and female respondents, between IMG and USMG fellows, or across census regions.

Expectations and satisfaction. Among the 131 fellows who had accepted job offers, we found the following with respect to their salary and compensation expectations.

Satisfaction with salary/compensation (**Exhibit 50**). The majority of fellows who had accepted job offers indicated that they were satisfied with their salary and compensation: 54.2% reported being "very satisfied" with their salary and compensation and a further 33.6% indicated that they were "somewhat satisfied."

Exhibit 50: Satisfaction with Salary Related to HPM (Q5.13)

What is your level of satisfaction with your expected salary/compensation?	Frequency	Percent
Very satisfied	71	54.2
Somewhat satisfied	44	33.6
Somewhat dissatisfied	11	8.4
Very dissatisfied	5	3.8
Totals	**131**	**100**

There were no statistically significant differences in satisfaction with salary and compensation between male and female respondents. However, IMGs were significantly less likely than UMSGs to report being very satisfied with their HPM salary (25% versus 61.5%; *P* = .005; effect size = -0.50). Fellows in the Northeast region were significantly less likely than those from all other regions to be very satisfied with their palliative medicine salary (35.7% versus 60.8%; *P* = .028; effect size = 0.29) and fellows in the West region were significantly more likely to be very satisfied with salary (79.2% versus 47%; *P* = .006; effect size = 0.38).

Job market perceptions (**Exhibit 51**). Fellows' perceptions of local job opportunities were good and similar to the last survey: 65.0% thought there were some or many jobs in their local community, the same as in 2016 and compared with 53% in 2015. On the other hand, 35% reported that there were no, very few, or few HPM practice opportunities within 50 miles of their training sites (again the same as in 2016 and compared with 46% in 2015). This may reflect the reality around teaching hospitals where former fellows have settled. The national job market was viewed far more positively.

Exhibit 51: Job Market Perceptions (Q6.11 and 6.12)

Job Market	Local			National		
Job availability	*2018 percent (N = 120)*	*2016 percent*	*2015 percent*	*2018 percent (N = 114)*	*2016 percent*	*2015 percent*
No jobs	1.7	2	2.6	0	0	0
Very few jobs	18.3	14	21.3	1.8	5	2.6
Few jobs	15	19	22.7	6.1	7	6.6
Some jobs	41.7	35	40	40.4	29	30.3
Many jobs	23.3	30	13.3	51.8	59	57.9
Totals	**100**	**100**	**100**	**100**	**100**	**100**

Male fellows were much more positive about the local job market (within 50 miles) than female fellows, with only 54% of female fellows stating there were some or many jobs locally compared with 83.7% of male fellows (*P* = .001; effect size = 0.65). This is in marked contrast to 2016, when there was no significant difference between male and female respondents in their perceptions of the local job market.

However, there were no significant differences between IMG and USMGs, or across census regions, in fellows' assessments of local practice opportunities.

Perceptions of the national job market were better but still showed significant differences between male and female fellows, with 100% of male fellows but only 87.8% female fellows reporting some or many jobs nationally (P = .026; effect size = 0.46). We found no statistically significant difference between IMG and USMGs or across census regions in fellows' assessments of national practice opportunities.

Respondents were asked what types of jobs they mainly searched for (**Exhibit 52**). One-half (49.6%) said they mainly searched for jobs in hospital palliative care, with another 16% that searched for a combination of hospice and palliative care. Only 9.6% mainly searched for jobs in some kind of hospice setting only. A further 14.4% mainly searched for a combination of palliative care with another specialty, primarily internal medicine (2.4%) and neurology, pediatrics, and neonatology (all, 1.6%). Other jobs types mainly searched for included community/outpatient palliative care (4.8%).

Exhibit 52: Types of HPM Jobs Searched For (Q6.1)

You said earlier you searched for a job involving hospice and palliative medicine. Were you primarily searching for a job that focused on:	Frequency	Percent
Hospice home care	7	5.6
Hospice inpatient unit	3	2.4
Hospice in nursing home/long-term care	2	1.6
Hospital palliative care	62	49.6
Community (outpatient) palliative care	6	4.8
A combination of hospice and palliative care	20	16
A combination of palliative care with another specialty (such as oncology, pediatrics, nephrology, emergency medicine)	18	14.4
Other	7	5.6
Total	**125**	**100**

In response to a question about factors that were important in their job search, fellows described job/practice in desired geographic location (46.3%), full-time position (34.3%), and job/practice in desired practice setting (17.9%) as the most important factors (each respondent was asked to indicate the three most important factors; **Exhibit 53**).

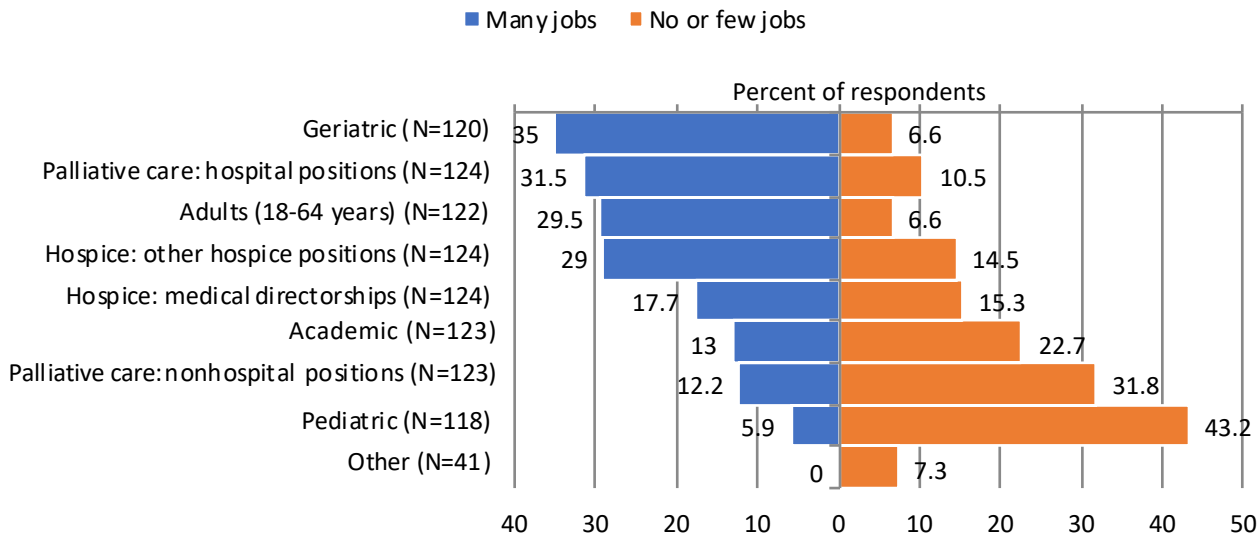
Exhibit 53: Most Important Factors in Job Search (Q6.15)

Factors most important in job search* (Select up to three factors)	Frequency	Percent
Job/practice in desired geographic location	62	46.3
Full-time position	46	34.3
Job/practice in desired practice setting	24	17.9
Low frequency of weekend duties	21	15.7
Not the only HPM physician	20	14.9
Predictable start and end time of each workday	19	14.2
Salary/compensation	19	14.2
Pediatric population	17	12.7
Job/practice offers teaching opportunities	16	11.9
Length of each workday	15	11.2
Low frequency of overnight calls	15	11.2
High portion of job in hospital palliative care consultation	15	11.2
Program is established, has good reputation	14	10.4
Setting sponsored work visa	8	6
Program is new, opportunity to grow a program	7	5.2
Part-time position	5	3.7
High portion of job in home hospice setting	5	3.7
Setting counts for loan payback	5	3.7
Other specific population group	4	3
Job/practice offers research opportunities	3	2.2
High portion of job in inpatient hospice setting	2	1.5
High portion of job in nonhospital palliative care consultation	2	1.5
Other employee benefit(s)	2	1.5
Other factor(s)	4	3
Total respondents answering any part of this question	**134**	*

** Respondents were asked to indicate the three most important reasons; responses do not add up to 100%.*

Types of jobs more and less available. Respondents were asked about their perception of the types of positions that were more or less available nationally based on their job search. Respondents were given a choice of settings developed from the most common responses to previous surveys (**Exhibit 54**). The more-available positions (comparing responses citing "many jobs" to responses citing "no" or "few" jobs) were geriatric positions, positions with adults, palliative care hospital positions, hospice positions other than medical directorships, and hospice medical directorships. The least-available positions were pediatric positions, palliative care nonhospital positions, and academic positions. Some of the variation may reflect the region or setting of the respondent. (Percentages are based on the number of people who gave an answer to each question as shown in the exhibit.)

Exhibit 54: Positions More Available and Less Available Nationally (Q6.13)



Would You Recommend the Specialty to Others and Why? (Q8.1 and Q8.2)

Almost all respondents (136 of the 137 fellows who answered this question; 99.3%) said they would recommend the specialty to others, an almost identical result to 2015 and 2016. In total, 96 of the 136 fellows (70.6%) provided a written response to this question, often writing at length, and were overwhelmingly positive in recommending the specialty to others.

The written responses were classified into the same four main categories used to classify the 2015 and 2016 survey responses.

The fellowship provided them with a new and valuable skill set (especially in regard to communicating with patients) and a new outlook on medical care.

- "It's a people-oriented and team-oriented field that is helping to alleviate the pathologic medicalization of death and dying. The training I received in communication during my fellowship will aid me tremendously as a provider regardless of the field in which I practice. Palliative care focuses on holistically relieving suffering, which is why many of us chose to enter the medical field in the first place."
- "I would strongly recommend HPM training to all learners. The principles of the field are applicable, and necessary, to all fields. I believe them to be the essence of good medicine. I have always had the goal to bring HPM practice to a primary care level and the concepts I have learnt have equipped me well with skills in complex medical decision making and advanced symptom management. I have also learnt not only to care for the physical sources of distress, but also emotional and spiritual. It is necessary to establish a primary palliative care model that other clinicians will be comfortable [with delivering] to advance the quality of care of patients with advanced illnesses."
- "It is a different way to view medicine; it is slow medicine in a fast-paced world. Even a week of training can help shape the way someone practices medicine because they can see there is another way to do things. They can see daily compassion and fulfillment."
- "I think palliative care and hospice are one of the answers to the complicated problem of physician well-being. 'Allowing the physician to care for the patient'—meaning to focus on what matters (spending time getting to know the patient's values, making a connection) and focus less

on what does not matter (charting, turning patients over quickly)—has been cited as a means to improve physician well-being. Learning how to care for the patient when prolonging life is not possible is a way to increase physician job satisfaction and self-esteem. I view palliative care as simply good care for seriously ill patients. Some amount of training would benefit all doctors. And many, if they understood the field and its potential, would choose it as a career path."

- "Palliative medicine is a great subspecialty that allows expertise in communication and symptom management is that is applicable across all aspects of medicine. It provides a great deal of satisfaction to be with patients in their very hardest times. I consider it a great honor to be a part of patients' lives, even if it is at the very end."
- "It is one of the few medical specialties that offers the ability to get to know your patients in an unhurried setting. It respects the whole patient as a person rather than a disease or a list of values."
- "Important skills inadequately covered in prior levels of medical training, increasing recognition of need for these skills both in the form of specialty HPM services and in the context of other specialty practice."

The work is personally satisfying, fulfilling, and important.

- "Focused on the 'whole person'—one of the rare areas of medicine that is truly interdisciplinary and views the input of others as equal and often more important than those of physicians. Truly embodies the psychosocial-spiritual approach to care of people as humans, not patients."
- "Death and dying is part of life and often is the time when patients and families feel neglected by their physicians. Actively participating in making the last days or hours of a patient['s life] dignifying and retaining as much quality of life as possible allows us to re-humanize ourselves and the view of the general population about physicians. Knowing that there are still 'things' to be done for a patient even when death is imminent is a must to be a well-rounded physician."
- "It is rewarding work that is different than any other medical specialty—[I] feel I have more time to spend connecting with patients and teams and families than I did in outpatient family practice residency. It is also a field that is growing, and I feel it is an exciting time to be part of that. I think it offers a good work-life balance and also the work that you do day-to-day keeps things in perspective about what is important in life."
- "I can't emphasize enough how important and fulfilling this field is. Palliative medicine places great emphasis on hearing and seeing patients as whole people, something that is largely overlooked in most other fields of medicine. I am challenged on a nearly daily basis and yet can't imagine more rewarding work."
- "I believe the skills taught in communication and symptom management are critical tools for any physician taking care of people with life-threatening or life-limiting illness. Although often sad, it is also work that fulfills and inspires and gives one purpose and meaning. It is critical to pay attention to work-life balance and self-care, but this is true in any area of medicine."
- "HPM fellowship has allowed me to feel whole, personally and professionally. I encourage all my students and trainees to enter fields that match their interests. If they find it satisfying and rewarding to grapple with difficult cases and their attendant uncertainty, communicate with patients/families, confront and relieve physical and nonphysical pain and suffering including existential concerns, and seek deeper meaning in the practice of medicine and daily life, I encourage them to pursue HPM. I also encourage people to find ways of pursuing HPM that don't require them to give up their primary specialty."

- "For me it's a calling. I feel tremendously like I am actually helping others and this is why I became a doctor."
- "Great opportunity to make a huge difference in patient care and quality of life. Very rewarding and challenging."

HPM is a growing field with likely future practice opportunities.

- "Highly rewarding field, fulfilling patient interactions, new and evolving field so lots of room for research/leadership roles."
- "Highly satisfactory, important field. It is expanding very quickly and it will have more and more opportunities."
- "HPM is vastly important in the fabric of our medical system and is becoming more vital by the day. Because it's a relatively new field, there are a large number of job opportunities available compared to many other fields."

The level of compensation and health of the job market

- "A career in hospice and palliative medicine offers a powerful role in the lives of patients with much flexibility and very fair compensation. I feel that I am serving the highest interests of my patients while also providing for the life I want within my family."
- "Palliative [care] has great earning potential and is essential to all aspects of medicine."

Discussion

Changes in the Demographic and Educational Characteristics of New HPM Physicians

The 2018 cohort of new HPM physicians were slightly younger than in 2015 and 2016: 20% were older than 40 years, compared with 36.5% and 30% in 2016 and 2015, respectively. This is also seen in the percentage with medical practice experience prior to entering their HPM fellowship: this decreased from 40.5% in 2015 to 38.5% in 2016 to 32.4% in 2018 (Exhibit 11).

Females continue to dominate in the specialty, representing 65% of the respondents (Exhibit 4). The percentage of respondents who were US medical graduates also remained steady at about 78% (Exhibit 2), slightly more than the percentage of all residents and fellows.

The vast majority of new HPM physicians (77.4%) continue to come from primary care specialties (Exhibit 8) and internal medicine continues to be the single largest source (47.3%) followed by family medicine (18.5%). For family medicine, this represented a slight decrease from 2016 (24.3%) and 2015 (23.4%). Pediatrics held steady at around 11%.

The Marketplace Demand for New HPM Physicians Was Steady, with the National Job Market Better for New HPM Physicians than Some Communities Around Teaching Hospitals

The job market for new HPM physicians appears to be steady, with some geographical areas and practice settings having many opportunities and other settings and areas, such as those around hospitals with training programs, being more limited. Although 29% of respondents indicated they had a difficult time finding a satisfactory position (Exhibit 45)—20.8% indicated they had to change plans as a result of limited opportunities (Exhibit 47) and 35% indicated that there were no, very few, or few jobs in their local job market (Exhibit 51)—these numbers were consistent with 2015 and 2016. As in prior years, the main reason for those having a difficult time relates to having available jobs in desired locations. The fact that the national job market is better than the local job market may indicate that job

markets where fellowship programs are located may offer fewer opportunities, already having filled available jobs with graduates from prior years.

Overall, respondents felt that the national job market offered many opportunities, especially in geriatric care, adult care, hospital palliative care, and hospice positions, and almost all found acceptable jobs following fellowship, mostly with compensation they found very or somewhat satisfactory. Of the 36 fellows who reported difficulty finding a satisfactory position, desired location was the most frequently cited reason for difficulty.

Fewer than One in 10 Graduates Chooses to Work Primarily in Hospice Care After Graduation

As in prior years, many more new HPM physicians were providing palliative care than were providing hospice services. Furthermore, far more were working in and/or for hospitals compared with those who were planning to work in hospice organizations. Less than 10% of new HPM physicians were going to work for hospices after graduation. However, some physicians employed by hospitals also are providing at least 20 hours per week of hospice care. Across all employers, 17 physicians (14%) provided 20 or more hours per week of hospice care.

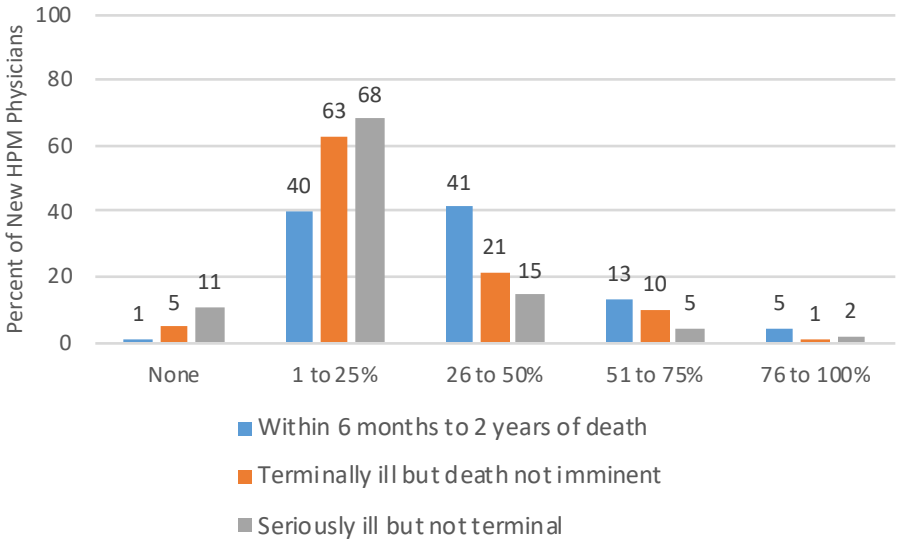
The 2018 survey includes several new questions related to the perceptions, experiences, and attitudes of new HPM physicians regarding palliative care compared with hospice. We found that about one-third (31.3%) had actively sought a fellowship program that emphasized hospice. Once in fellowship, they did not rate the educational quality of hospice rotations as highly as palliative care rotations (41.8% excellent for hospice versus 61.1% excellent for palliative care). They did not feel as encouraged to enter hospice as a field (14.7% strongly encouraged to enter hospice versus 49.7% strongly encouraged to enter palliative care). Compared with hospice, more respondents felt that palliative care was intellectually stimulating, a good fit with their interests, and suitable early in a career and had good income potential.

The new questions revealed some sharp differences in the perceptions of hospice compared with palliative care in both the training experience and future career experience.

Nearly All New HPM Physicians Are Providing Some Services to Patients Who Are Not Within 6 Months of Death.

The skillset of HPM physicians, including providing pain and symptom management and patient-centered care, appears to be well matched with the growing number of individuals living with chronic conditions and serious illnesses. To assess whether HPM physicians were treating patients beyond those in the last 6 months of life, the 2018 survey included questions on the prognosis of patients cared for by new HPM physicians. As indicated in **Exhibit 55**, the vast majority of new HPM physicians are providing care to seriously ill patients who are not in the last 6 months of life. These services are being provided in a variety of settings, including community-based settings.

Exhibit 55: Prognosis of Patients Treated by New HPM Physicians (Q5.32)



This development—HPM physicians providing services "upstream"—is likely to increase future demand for HPM physicians.

Not All Physicians Completing HPM Fellowships Add to the Overall Availability of HPM Services

Although the number of physicians completing fellowship programs has increased steadily in the past decade, not all of those completing training add to the supply of physicians providing HPM services. As revealed by the 2018 survey, there are several reasons for this:

- Nearly 22% of graduates indicated they were going into mixed practices where they would be providing both HPM and non-HPM services and another 4.2% indicated they would be providing only non-HPM services. For those going into mixed practices, the exact mix of hours between HPM and non-HPM services is not known. However, of the 122 graduates going into patient care services, only 96 (78.7%) indicated more than 20 hours per week of HPM services.
- Some graduates are entering non–patient care positions as their principal position and others are continuing their education or taking a break from medicine. In 2018, this group was equal to 13.3% of the graduates.
- Some physicians who enter HPM fellowships already are providing some HPM services and may be entering training to improve their HPM skills. In 2018, 8.8% of respondents indicated that they had provided HPM services in their prior positions. This compares with 7.4% and 12.6% in 2016 and 2015, respectively (Exhibit 15). Information on how much of the respondents' prior practices were devoted to HPM was not collected, so it is not possible to estimate how much of the interest in pursuing HPM fellowships is related to skill and quality enhancement versus additional hours of HPM service.

When assessing future supply and demand for HPM physicians, it will be important to consider the extent to which some graduates do not provide HPM services.

Continued High Satisfaction with the Specialty

As in other years, respondents described the specialty as highly fulfilling and rewarding, with almost all taking the time to provide positive written comments. Respondent comments about whether to recommend the specialty to others were almost entirely enthusiastic, heartfelt, and optimistic about finding fulfillment in the work. A very impressive 135 of 136 respondents would recommend the specialty!

Conclusion

This survey of the HPM class of 2017–2018 provides important insights about the current supply and demand for hospice and palliative care. When this information is added to that of prior surveys, a few trends begin to emerge. The most striking is respondents' consistently enthusiastic commitment to their new field. Another is that although the overall job market remains strong, 29% of respondents reported difficulty finding a satisfactory position, mostly because of desired location. Finally, fellowships do not appear to be feeding many graduates into available hospice jobs. This information will inform the HPM community and policymakers about the workforce trends impacting the delivery of hospice and palliative care.

Appendix 1: Comparison of Respondents to ACGME Data on HPM Fellows

Exhibit 56: Sex

	2018 survey respondents		ACGME HPM fellow data[H]	
Sex	*Frequency*	*Percentage*	*Frequency*	*Percentage*
Male	48	35%	116	34.3%
Female	89	65%	214	64.3%
Not reported	0	0%	3	0.9%
Totals	**137**	**100%**	**333**	**99.5%**

Exhibit 57: IMG Status

	2018 survey respondents		ACGME HPM fellow data	
IMG Status	*Frequency*	*Percentage*	*Frequency*	*Percentage*
IMG	32	21.8%	83	24.9%
USMG (MD + DO)	115	78.2%	248	74.5%
Canadian MG	0	0	2	0.6%
Totals	**147**	**100%**	**333**	**100%**

Exhibit 58: Race/Ethnicity

	2018 survey respondents		ACGME HPM fellow data	
Race/ethnicity †	*Frequency*	*Percentage*	*Frequency*	*Percentage*
Asian & Pacific Islander	28	20.7%	65	22.6%
White	5	65.9%	170	59.2%
African American	89	3.7%	18	6.3%
Hispanic*	9*	6.7%*	19*	6.6%*
Native American	0	0%	0	0%
Other/Unknown	14	9.6%	15	5.2%
Totals	**135**	**100%**	**287†**	**100.0%**

** Although we use separate race and ethnicity measures in the HPM Fellow Survey, "Hispanic" is included within a single race/ethnicity measure in the ACGME data. Therefore, "Hispanic" figures are not included in the totals for the survey columns.*

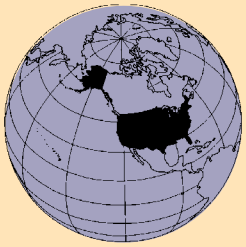
† Individuals with unknown race/ethnicity were excluded in calculations of the ACGME data for consistency with the GWHWI survey.

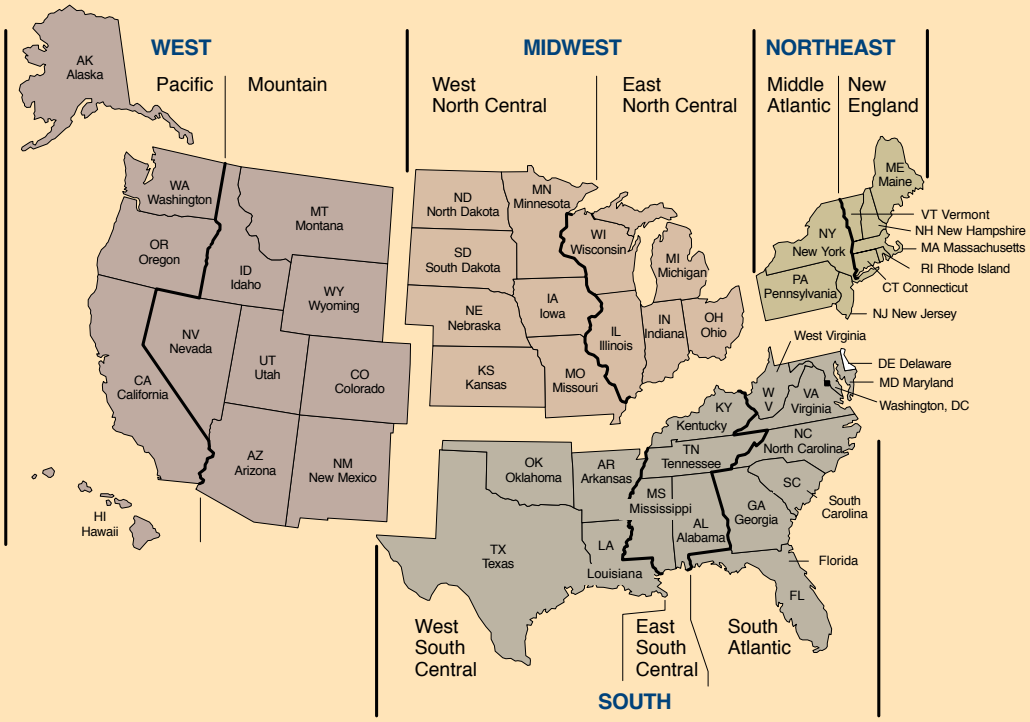
H ACGME Data Resource Book, academic year 2017–2018. ACGME figures show fellows in the graduating class.

Appendix 2: Map of US Census Regions

Figure 1.

Map of the United States, Showing Census Divisions and Regions





Source: U.S. Bureau of the Census

Key:

Region 1: Northeast

Region 2: Midwest

Region 3: South

Region 4: West