



# A Profile of New Hospice and Palliative Medicine Physicians

Results from the Survey of Hospice and Palliative Medicine  
Fellows Who Completed Training in 2015

By

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## Highlights

The class of 2014–2015 graduates from hospice and palliative medicine (HPM) fellowship training programs, as represented by the 112 respondents to this survey, are very pleased with their new specialty and their immediate employment path following fellowship. Respondents' comments about recommending the specialty to others were almost entirely enthusiastic, heartfelt, and optimistic about finding fulfillment in the work.

A significant portion of the 2014–2015 class of HPM fellows had substantial experience as practicing physicians before entering fellowship: 21% had more than 5 years of medical practice experience and 11% had more than 10 years. This means that many HPM graduates are entering HPM practice with skills and experience beyond the norm for most graduating fellows. It also means that the likely number of years these physicians will work in HPM may be less than for younger physicians, which has an impact on the overall long-term workforce capacity.

Of the respondents who reported hours worked by type of HPM activity, 65 reported spending 20 or more hours weekly in palliative care, while only 11 reported 20 or more hours weekly in hospice. Given that fellows reported plentiful job opportunities in hospice, it appears that graduates are acting on a preference for palliative care, especially hospital-based palliative care, over hospice care. Compensation does not appear to be the driving factor in this choice, as compensation was equivalent between those working mostly in hospice versus mostly in palliative care.

The survey of the HPM class of 2014–2015 provides very important insights about the current supply and demand for hospice and palliative medicine physicians. The survey also provides a critical baseline to compare results of future surveys of HPM physicians entering the specialty. This information will inform the HPM community and policymakers about important workforce trends that make an impact on the delivery of hospice and palliative care.

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

GWHWI and AAHPM welcome comments and feedback on this report to [info@aaahpm.org](mailto:info@aaahpm.org).

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## Preface

The specialty of Hospice and Palliative Medicine (HPM) is relatively new, receiving formal recognition by the American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME) in 2006 and the American Osteopathic Association (AOA) in 2007. The formal recognition reflects a growing need for care for individuals with a life-threatening or serious illness and those near the end of life. The establishment of the specialty is happening at a time of transformation in healthcare delivery as the nation looks to both increase access and constrain the growth in costs to 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 (GHWI) 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 that have recently completed fellowship training). New physicians entering the field provide a picture of the future supply, including their demographic and educational backgrounds and their distribution. The survey also provides a good picture of current demand and use based on the jobs new HPM physicians are entering, their professional activities, and their experience in the job market.

This report presents key findings from the survey of physicians who completed training in HPM in 2015. The survey is part of a larger study to monitor trends in the HPM workforce; assess the adequacy of the supply and distribution of HPM physicians; and inform policies to ensure a high-quality, well-prepared hospice and palliative care physician workforce.

This report presents a data portrait of the fellows training in 2014–2015. In different sections, the report presents findings about

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

For the purposes of this report, we use AAHPM's definitions, which describe hospice and palliative medicine as follows:

- *Palliative care* focuses on improving a patient's quality of life by managing pain and other distressing symptoms of a 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 their treatments with what's important to them, and help families navigate the complex healthcare systems.<sup>1</sup>

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<sup>1</sup> Taken from: [Palliativedoctors.org](http://Palliativedoctors.org)

## Executive Summary

The specialty of Hospice and Palliative Medicine (HPM) is growing rapidly in response to rising demand and need, along with the formal recognition of the specialty by the American Board of Medical Specialties (ABMS) and the American Council for Graduate Medical Education (ACGME) in 2006 and the American Osteopathic Association in 2007. The number of fellows training in HPM in ACGME-accredited programs has grown from 120 fellows in the 2009–2010 academic year to 243 for 2014–2015<sup>2</sup> and an estimated 297 for 2015–2016.<sup>3</sup> To better understand current and future supply and demand and to inform decisions regarding how much more growth would be advisable, the George Washington University Health Workforce Institute (GWHWI), in collaboration with the American Academy of Hospice and Palliative Medicine (AAHPM), undertook a survey of the physicians who trained in the specialty in 2014–2015. The survey was designed to provide information about who is going into HPM, where they are going after training, and their experience in the job market.

In October and November 2015 GWHWI surveyed physicians who had recently finished their fellowship. AAHPM provided GWHWI with e-mail addresses of 195 of the estimated 243 fellow from 2014–2015. One hundred twelve of the 195 responded, for a 58% response rate. Based on the similarity of demographic and educational characteristics of the respondents to the characteristics of all 243 HPM fellows as reported to ACGME, the respondents appear closely representative of all 2014–2015 HPM fellows (**Exhibit 1** [Exhibit 1<sup>4</sup>]).

### Exhibit 1. Comparison of 2014–2015 Fellows Survey Respondents with ACGME Data<sup>5</sup>.

	GW Survey Respondents	All ACGME HPM Fellows
Fellows	112	243
Mean age	37.9	37.1
% Male	37.4%	37.6%
% Female	62.6%	62.4%
% International medical school graduate	22.5%	25.1%
% African American	5.8%	6.8%
% Hispanic	6.7%	6.3%
Osteopathic physicians (DOs; % of all fellows)	<b>10.8%</b>	<b>14.4%</b>

### Key Findings

- A majority of responding HPM physicians came from primary care specialties (36% from internal medicine; 18% from family medicine), 12% came from geriatrics, about 11% from pediatrics, and 10% from emergency medicine; several other specialties are also represented (**Exhibit 2** [Exhibit 14]).
- New HPM physicians can be divided into 3 groups: those going directly into fellowship training from a prior residency or fellowship program in another specialty (60%), those with 1 to 4 years of practice prior to the fellowship (19%), and those with 5 or more years of experience (21%).
- The presence of this subgroup of experienced physicians is a notable feature of this class of HPM graduates but one that appears to vary by prior specialty. For example, although most HPM fellows do enter training right after other graduate medical education (GME), almost all physicians

2 ACGME Data Resource Book, Academic Year 2014–2015

3 AAHPM Internal Documents

4 Exhibit numbers in brackets reflect exhibit numbers as they appear in the full report.

5 ACGME Data Resource Book, Academic Year 2014–2015

coming from the specialties of emergency medicine and anesthesiology had 5 or more years of prior medical practice experience (Exhibit 2).

## Exhibit 2. Last Specialty Prior to Fellowship by Years of Experience

<i>Last Specialty Prior to Fellowship</i>	<i>Total</i>	<i>Percent</i>	<i>Years of experience before fellowship</i>		
			<i>None</i>	<i>1 to 4 Years</i>	<i>5 or More Years</i>
Anesthesiology	2	1.8	0	0	2
Emergency medicine	11	9.9	1	0	10
Family medicine	20	18.0	12	6	2
Geriatrics	13	11.7	9	4	0
Internal medicine	40	36.0	30	5	5
Pediatrics	12	10.8	6	5	1
Pediatric subspecialties	4	3.6	3	0	1
Physical medicine and rehabilitation	2	1.8	2	0	0
Other	7	6.3	3	2	2
<b>Totals</b>	<b>111</b>	<b>100</b>	<b>66</b>	<b>22</b>	<b>23</b>

- Of the 45 physicians with practice experience prior to their HPM fellowship, 14 (13% of total respondents) indicated they had been providing HPM services prior to their fellowship.
- Of those with prior practice experience, the most common practice setting was hospitals, either employed directly or through affiliation (50%); the second most common setting was single-specialty group practice (22%).

## Post-Training Activities

- Regarding their current or forthcoming practice, 26% of the fellows were in academic clinical roles (many of which involve patient care services); 39% said their principal clinical activity was exclusively in either palliative medicine or hospice care; 20% were in a mix of palliative/hospice care and non-HPM care; and only 4% were in patient care that did not involve palliative or hospice care (**Exhibit 3** [Exhibit 16]). Five percent were undertaking further training.

## Exhibit 3. Activity After Completion of Current Training Program

<b>What best describes your principal activity now that you have completed your HPM fellowship program?</b>	<b>Frequency</b>	<b>Percent</b>
Patient Care—Exclusively Palliative Medicine/Hospice	42	38.9
Academic Clinician-Educator	28	25.9
Patient Care—Mixed Palliative Medicine/Hospice and Non-HPM	22	20.4
Additional Subspecialty Training or Fellowship	5	4.6
Patient Care—Exclusively Non-HPM	4	3.7
Undecided/Don't Know Yet	3	2.8
Other	4	3.7
<b>Total</b>	<b>108</b>	<b>100</b>

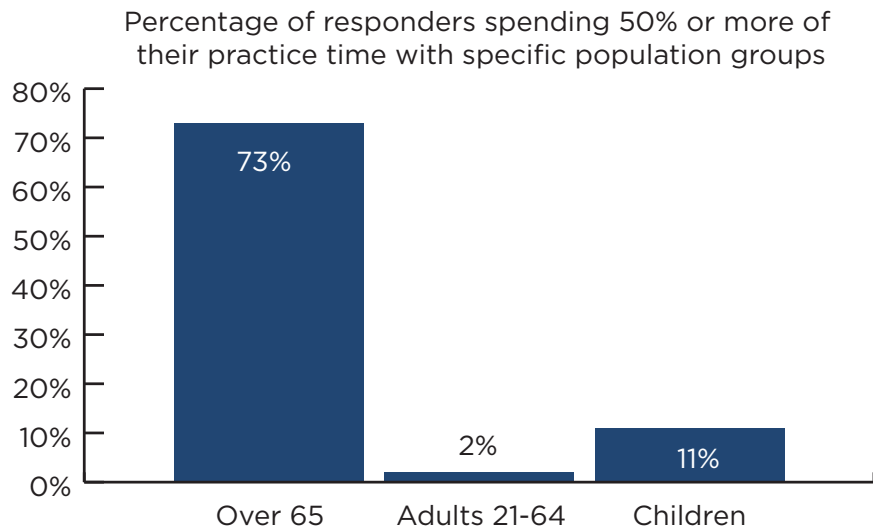
- Most of the new HPM physicians (65%) are working for hospitals, hospital-affiliated practices, or academic medical centers. Only 9 of 95 respondents were working for hospice as their primary practice (**Exhibit 4** [Exhibit 20]).

## Exhibit 4. Patient Care Setting

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	43	45.3
Hospital-Affiliated Practice	14	14.7
Hospice	9	9.5
Veterans Affairs Setting	6	6.3
Multispecialty Group Practice	5	5.3
Faculty Practice Plan	5	5.3
Single-Specialty Group Practice	1	1.1
HMO/Managed Care Organization (MCO)	1	1.1
Medical School	1	1.1
Community Health Center	1	1.1
Other	9	9.5
<b>Totals</b>	<b>95</b>	<b>100</b>

- Most new HPM physicians (73%) will be spending the majority of their time caring for people older than 65 years, 11% will be providing services primarily to children, and 2% will be providing services primarily to adults between 21 and 64 years old (**Exhibit 5** [Exhibit 22]).

## Exhibit 5. Age of Patients Respondents Expect to Serve



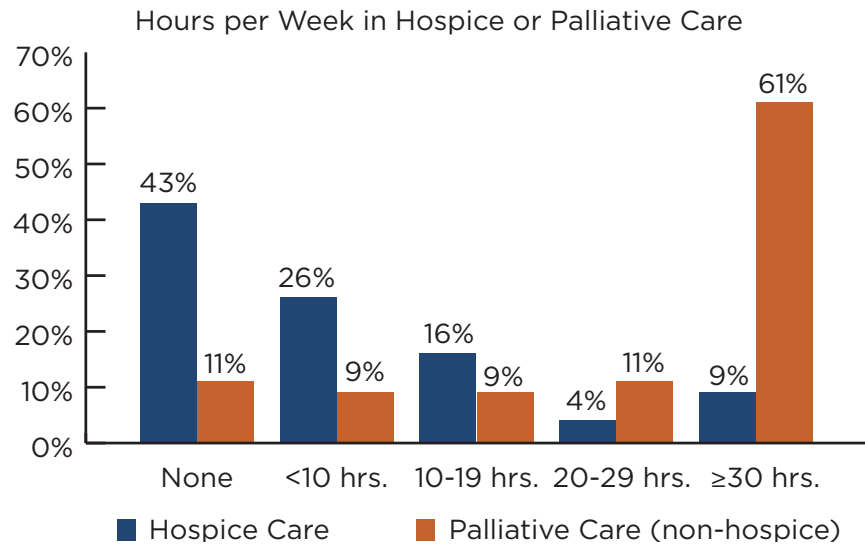
## Comparing Physicians Going Primarily into Hospice and Those Going into Palliative Care

Fellows reported the number of hours they were spending (or expected to spend) in hospice or palliative care practice. This makes it possible to assess differences between those whose work was mainly in hospice care and those who were mainly delivering palliative care.

- Of the 93 respondents who reported their hours providing HPM (including those listing their principal activity as academic clinician-educator), 65 (72%) of the 93 reported spending 20 or more hours providing palliative care, and only 11 (13%) were devoting 20 or more hours per week to hospice care (**Exhibits 6 and 7** [Exhibits 24 and 25]). Thirty-nine (42%) indicated they would be spending some time, but less than 20 hours per week, on hospice care.



## Exhibit 6. Percent of Respondents by Hours in Hospice and Palliative Care



- These two groups of fellows differed in three main characteristics: Fellows working mainly in palliative care were more likely to be 40 years or younger, to have taken their earliest GME in family medicine or pediatrics (not significant), and to have had fewer than 5 years of practice experience prior to their HPM fellowship.
- In contrast, fellows delivering mainly hospice care were more likely to be older than 40 years, to have taken their earliest GME in emergency medicine (not significant), and to have had 5 or more years of medical experience prior to beginning their HPM fellowship.
- As indicated in Exhibit 7, 4 of 32 internal medicine physicians indicated they were providing 20 hours or more of care per week in hospice while only 1 of 19 family physicians and 1 of 11 pediatricians reported going into hospice for more than 20 hours per week. Of note, 2 of 2 anesthesiologists and 2 of 9 emergency medicine physicians reported working in hospice more than 20 hours per week.

## Exhibit 7. Last Specialty Prior to HPM Fellowship

Last specialty prior to HPM Fellowship	Fellows with Indicated Number of Weekly Hours in Patient Care			Total
	20+ Palliative Care	20+ Hospice	Neither	
Anesthesiology	0	2	0	2
Emergency medicine	3	2	4	9
Family medicine	15	1	3	19
Geriatrics	9	0	3	12
Internal medicine	24	4	4	32
Pediatrics	8	1	2	11
Physical medicine and rehabilitation	2	0	0	2
Other	4	1	1	6
<b>Total</b>	<b>65</b>	<b>11</b>	<b>17</b>	<b>93</b>

## Average Income

- The median expected income range was from \$175,000 to \$199,999; the second most cited range was \$200,000 to \$224,999. The average (mean) income calculated using the midpoint of the income ranges used in the survey was \$183,000.<sup>6</sup>
- The average income for those primarily providing hospice services and those primarily providing palliative care services was equal at \$185,000. However, the average income for physicians working for hospice was \$195,800, even better than those working for hospitals (directly or through an affiliation relationship), which was \$189,000.
- Men had a higher average income than women (\$192,000 versus \$178,000). US medical school graduates had a higher average income than international medical school graduates (\$185,000 versus \$173,000). Respondents from the Midwest had the highest average income at \$202,000, while those from the southern region had the lowest at \$167,000.

## Job Market Experience

- Most fellows were able to find a satisfactory position without difficulty. However, 15 (19%) reported difficulty. Respondents graduating in the Northeast region generally reported an easier time finding a job. Only 1 respondent out of 16 from the Northeast region reported difficulty finding a position, compared with 14 out of 60 from other regions. However, the difference was not statistically significant.
- The most cited reason for having a difficult time finding a satisfactory position was lack of jobs/practice opportunities in desired locations (11 of the 15 respondents); the second most commonly cited reason was “Undesirable mix of clinical activities,” cited by 8 of the 15.
- The responses to a question about whether respondents had to change plans due to limited practice opportunities were similar: 19% reported they had to change their plans. None of the 16 respondents from the Northeast region reported having to change plans, compared with 19% in the Midwest, 21% in the West, and 35% in the South. The difference between the Northeast region and all other regions was statistically significant.
- The local job market (within 50 miles of the fellowship program) is limited: 47% of the respondents reported “no jobs,” “very few jobs,” or “few jobs” close to their fellowship program location. The national job market appears better—only 9% reported “no jobs,” “very few jobs”, or “few jobs” regarding the national market.
- Based on comments in response to an open-ended question about the types of jobs more and less available, it appears that there are many jobs in hospice, including medical director—19 respondents cited hospice positions as being more available, and only 2 said less available. On the other hand, 8 respondents said jobs were less available for pediatric HPM physicians, and only 1 said they were more available.

## Would They Recommend the Specialty of Hospice and Palliative Medicine?

- The responses to this open-ended question indicate that fellows are very highly satisfied with the specialty: 105 of 107 respondents would recommend the specialty. The two who would not had reservations that the specialty was appropriate only for certain people—either those who had extensive medical experience or those who were not pursuing pediatric specialization. In total, 70 of the 112 fellows (63%) took the time to provide an optional written response to this question, often at length, and an overwhelming number would recommend the specialty to others.

<sup>6</sup> Average incomes reported here are not adjusted for hours worked.

- The written responses fell into four main categories:
  - » The fellowship provided them with a new and valuable skill set (especially regarding communicating with patients) and a new outlook on medical care.
  - » The work is personally satisfying, fulfilling, and important.
  - » HPM is a growing field with likely future practice opportunities.
  - » The level of compensation is “decent” with a healthy job market.

## Survey Methods

The goal of this survey was to better understand issues related to the supply, demand, distribution, and use of HPM physicians. New physicians entering the field provide a picture of the future supply in terms of demographic and educational backgrounds. They also provide a good picture of current demand and use based on the jobs new HPM physicians are entering, their professional activities, and their experience in the job market.

An early draft of the survey was shared by the George Washington Health Workforce Institute (GWHWI) research team with the American Academy of Hospice and Palliative Medicine (AAHPM) and amended in response to comments. Although the survey design drew on the GW team’s previous experience of surveys of fellows completing training, considerable redesign was required for the unique aspects of the HPM specialty.

Because the total number of HPM fellows graduating each year is relatively small, GWHWI chose to survey all fellows who could be reached via email rather than select a sample. According to the Accreditation Council for Graduate Medical Education (ACGME), there were 243 fellows in ACGME-accredited positions in 2015<sup>7</sup>. AAHPM worked with fellowship program directors to obtain permanent e-mail addresses for graduating fellows and obtained e-mail addresses for 195 fellows. GWHWI then invited all 195 fellows to participate in the survey. An initial informational e-mail was sent by AAHPM, followed by a formal invitation from GWHWI containing an individualized link through the REDCap survey software. Several follow-up reminders were sent over a period of 6 weeks to maximize the number of responses. The REDCap survey software allowed the GW team to target reminders only to fellows who had not yet submitted complete responses and also permitted later follow-up to clarify individual responses when this was required.

The final responses were downloaded from REDCap for cleaning and analysis using Stata 13. Some of the final significance testing was more conveniently carried out in Microsoft Excel, which also was used in the production of charts and graphs.

## Overview of Respondents

With a total of 112 HPM fellows responding to the survey, the response rate was 58% of the fellows invited and 46% of all 243 ACGME HPM fellows from the 2014–2015 academic year. As **Exhibit 1** shows, the survey respondents were very similar to the entire population of HPM fellows, based on ACGME demographics data. None of the slight demographic differences was statistically significant.

Exhibit 1 also shows how HPM compares with several other internal medicine subspecialties and all internal medicine residents and fellows. In general, HPM fellows are older, more likely to be female, more likely to be an osteopath, less likely to be an international medical school (IMG) graduate, and more likely to be African-American.

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<sup>7</sup> ACGME Data Resource Book, Academic Year 2014–2015

## Exhibit 1. Comparison of Fellow Survey Respondents with ACGME Data<sup>8</sup>

	GW Survey Respondents	All ACGME HPM Fellows	All ACGME Geriatrics	All ACGME Nephrology	All ACGME Oncology	All ACGME Residents and Fellows
Fellows	112	243				
Mean age	37.9	37.1*	34.2*	33.5*	32.6*	30.6*
Male	37.4%	37.6%	35%	61%	53%	54%
Female	62.6%	62.4%	65%	39%	47%	46%
IMG	22.5%	25.1%	55%	68%	43%	26%
DO (% of all fellows)	10.8%	14.4%	9.7%	5.7%	5.1%	9.0%
African-American**	5.8%	6.8%	6.7%	6.3%	3.3%	6.0%
Hispanic**	6.7%	6.3%	8.4%	7.2%	4.7%	6.4%

\* ACGME gives the age of first-year residents; the age given for surveyed HPM fellows is age on graduation.

\*\* Note that ACGME uses a single table for race and ethnicity while the Palliative Care Fellows Survey used 2 separate questions, one for race and one for ethnicity. "Hispanic" is included within a single race/ethnicity measure in the ACGME data.

## Education, Citizenship Status, and Demographics of Fellows

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

### Location of Medical School

Three-quarters of survey respondents were US medical school graduates (USMGs) from both allopathic and osteopathic schools within the United States (**Exhibit 2**). One (1%) was educated in Canada, while 24 (24%) were educated in other countries. As noted above, the percentage of IMGs in HPM is less than in other internal medicine subspecialties; it also is less than in general internal medicine.

## Exhibit 2. Medical School Location (Q1.3)<sup>9</sup>

Where did you attend medical school?	What type of medical education do you have?		
	Allopathic	Osteopath	Total
United States	74 (75%)	12 (100%)	<b>86 (77%)</b>
Canada	1 (1%)	0 (0%)	<b>1 (1%)</b>
Other	24 (24%)	0 (0%)	<b>24 (22%)</b>
<b>Total</b>	<b>99 (100%)</b>	<b>12 (100%)</b>	<b>111 (100%)</b>

The great majority (92%) of respondents reported that they were US citizens, either native born or naturalized, and one (1%) reported being a permanent resident of the United States. Only 8 reported they were noncitizen holders of either H or J visas (**Exhibit 3**).

<sup>8</sup> Source: ACGME Data Resource Book, Academic Year 2014-2015

<sup>9</sup> Survey questions are numbered in the copy of the survey instrument supplied separately. These question numbers are used throughout this report to indicate the source question for data tables, charts, and narrative.

### Exhibit 3. Citizenship Status (Q5.3)

What is your current citizenship status?	Frequency	Percent
Native born United States	85	80.2
Naturalized United States	12	11.3
H-1, H-2, H-3 temporary worker	5	4.7
J-1, J-2 exchange visitor	3	2.8
Permanent resident	1	0.9
<b>Total</b>	<b>106</b>	<b>100</b>

### Sex

The majority of respondents (62%) were female (**Exhibit 4**). This is higher than the overall percentage for all ACGME residents and fellows, which is 45.8%. IMGs were more likely to be male (48%) than USMGs (35%), but the difference was not significant ( $P = .259$ ).

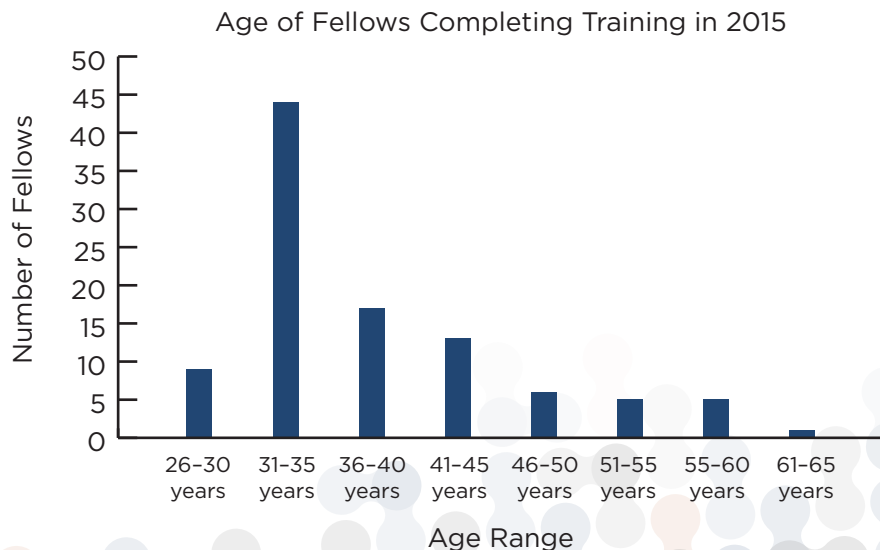
### Exhibit 4. Respondents' Sex (Q5.1)

What is your sex?	USMG	IMG	Total Respondents	All ACGME
Female	54 (65%)	12 (52%)	<b>66 (62%)</b>	45.8%
Male	29 (35%)	11 (48%)	<b>40 (38%)</b>	54.2%
<b>Total</b>	<b>83 (100%)</b>	<b>23 (100%)</b>	<b>106 (100%)</b>	<b>100%</b>

### Age

The median age of fellows when graduating from their HPM fellowship was 35 years, but almost 30% graduated when they were older than 40. There were no significant age differences between US versus IMG status ( $P = .436$ ). The older average age of physicians on graduation compared with fellows in other subspecialty training programs is notable and statistically significant. Exhibit 1 shows that the average age on entering training in geriatrics, nephrology, and oncology (all subspecialty training programs engaged in after completing an initial primary specialty residency) was 33 to 34 years, compared with 37 years for HPM fellows upon graduation. This is due to the large subgroup (30%) of HPM physicians who were 40 years or older when they graduated.

### Exhibit 5. Respondents' Age (Q5.2)



## Race/Ethnicity

IMGs were significantly more likely to be nonwhite than USMGs, mainly due to much higher numbers of Asians and Pacific Islanders among IMGs (45% versus 16% for USMGs;  $P < .01$  for all racial differences;  $P < .01$  for Asian and Pacific Islander versus all other races; **Exhibit 6**).

### Exhibit 6. Respondents' Race\* (Q5.4)

What is your race?	USMG	IMG	Total
Asian	13 (16.1%)	10 (45.5%)	<b>23 (22.3%)</b>
Black/African-American	4 (4.9%)	2 (9.1%)	<b>6 (5.8%)</b>
White	63 (77.8%)	9 (40.9%)	<b>72 (69.9%)</b>
Other	1 (1.2%)	1 (4.6%)	<b>2 (1.9%)</b>
<b>Total</b>	<b>81 (100%)</b>	<b>22 (100%)</b>	<b>103 (100%)</b>

\*Percentages are based on column totals.

There were not statistically significant different proportions of Hispanic respondents between USMGs and IMGs ( $P = .63$ ; **Exhibit 7**).

### Exhibit 7. Hispanic/Latino Respondents (Q5.5)

Are you Hispanic or Latino?	USMG	IMG	Total	All ACGME
Hispanic	5 (6.2%)	2 (9.1%)	7 (6.7%)	6.4%
Non-Hispanic	76 (93.8%)	20 (90.9%)	96 (93.2%)	93.6%
<b>Total</b>	<b>81 (100%)</b>	<b>22 (100%)</b>	<b>103 (100%)</b>	<b>100%</b>

## 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 (69%) took their first GME in internal or family medicine. An additional 12% began in pediatrics, and 10% began in emergency medicine. In the “other” category were three fellows whose first GME residency was in combined internal medicine/pediatrics and one who took plastic surgery.

Although IMGs more often than USMGs had taken their first US GME residency in internal medicine (56% versus 42%), the difference was not statistically significant ( $P = .256$ ).

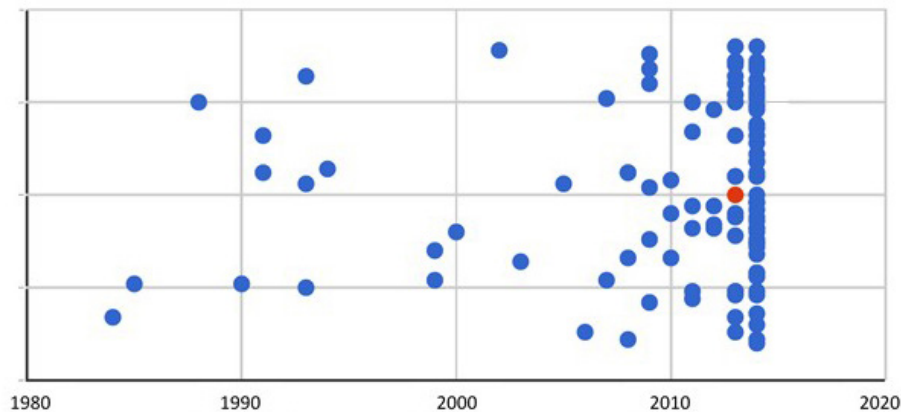
### Exhibit 8. Earliest GME Specialty by US/IMG Status (Q1.5 x Q1.3)

What was the specialty of your earliest US GME residency?	USMG	IMG	Total
Anesthesiology	1 (1.2%)	0 (0%)	1 (0.9%)
Emergency medicine	9 (10.5%)	2 (8%)	11 (9.9%)
Family medicine	20 (23.3%)	6 (24%)	26 (23.4%)
Internal medicine	36 (41.9%)	14 (56%)	50 (45.1%)
Obstetrics and gynecology	1 (1.2%)	0 (0%)	1 (0.9%)
Pediatrics	11 (12.8%)	2 (8%)	13 (11.7%)
Physical medicine and rehabilitation	2 (2.3%)	0 (0%)	2 (1.8%)
Psychiatry and neurology	2 (2.3%)	0 (0%)	2 (1.8%)
Other	4 (4.7%)	1 (4%)	5 (4.5%)
<b>Total</b>	<b>86 (100%)</b>	<b>25 (100%)</b>	<b>111 (100%)</b>

**Exhibit 9** provides a picture of the distribution of the year that respondents completed their first residency program. Those who completed their first residency most recently are on the right; the dots on the left represent those who completed their first training years ago.

### Exhibit 9. Date of earliest GME (Q1.7)

In what year did you complete your earliest GME residency?



Note. Red dot indicates the median value

### Additional Training Prior to HMP Fellowship

Twenty-nine (26%) of the fellows had taken more than one residency or fellowship before beginning their HPM fellowship (**Exhibit 10**).

### Exhibit 10. Additional Residencies or Fellowships (Q1.8)

Did you undertake any further residency or fellowship prior to your HPM fellowship?	Frequency	Percent
Yes	29	25.9
No	83	74.1
<b>Total</b>	<b>112</b>	<b>100</b>

## Prior Medical Practice

Unlike in many specialties, many of the HPM fellows had actual experience practicing medicine before entering the specialty. As indicated in **Exhibit 11**, more than 40% of the fellows had practiced medicine before their HPM training.

### Exhibit 11. Prior Medical Practices (Q1.14)

Were you practicing medicine prior to your HPM fellowship?	Frequency	Percent
Yes	45	40.5
No	66	59.5
<b>Total</b>	<b>111</b>	<b>100</b>

These 45 respondents were practicing in numerous specialties (**Exhibits 12 and 13**): 67% of the HPM fellows who were practicing medicine prior to their fellowship were in internal medicine, family medicine, or emergency medicine; an additional 11% were in pediatrics. In the “other” category were combined internal medicine and pediatrics, hematology, obstetrics and gynecology, pediatric critical care, plastic surgery, psychiatry and neurology, and hospitalists.

### Exhibit 12. Prior Medical Practice Specialty (Q1.15)

In what specialty were you practicing?	Frequency	Percent
Anesthesiology	2	4.4
Emergency medicine	10	22.2
Family medicine	9	20.0
Internal medicine	11	24.4
Pediatrics	5	11.1
Other	8	17.7
<b>Total</b>	<b>45</b>	<b>100</b>

### Exhibit 13. Years of Practice Before HPM Fellowship (Q1.19)

For how many years had you been practicing prior to your HPM fellowship?	Frequency	Percent of those with prior practice	Percent of all respondents
0	66	N/A	59.5
1	9	18.2	8.1
2	4	9.1	3.6
3	5	11.4	4.5
4	4	9.1	3.6
5 to 10	10	22.7	9.0
11 or more	13	29.5	11.7
<b>Total</b>	<b>111</b>	<b>100</b>	<b>100</b>

Five of the fellows who had no practice experience were older than 40 years, which seems unusual. Further review of these five fellows revealed nothing else unusual about them; none of them had completed his or her earliest US GME before 2013. Three of the five were natural born US citizens, one was a naturalized citizen, and one was an exchange visitor.



## Last Specialty Prior to HPM Fellowship

Responses about prior medical training and practice enabled fellows to be grouped according to their “last specialty before their HPM fellowship.” For fellows who had been in medical practice, their “last specialty” was defined as their prior practice specialty; for those who had not been in medical practice, their “last specialty” was considered their last residency or fellowship prior to their HPM fellowship. As seen in **Exhibit 14**, using this approach, the dominant “last specialty” for HPM fellows was still internal medicine (36%), with significant numbers also from family medicine (19%). However, geriatrics emerges as a major source of HPM fellows (12%).

### Exhibit 14. Last Specialty Prior to Fellowship by Years of Experience (Q1.5 etc. x Q5.2)

Last specialty prior to fellowship	Total	%	Years of experience before fellowship		
			None	1 to 4 years	5 or more years
Anesthesiology	2	1.8	0	0	2
Emergency medicine	11	9.9	1	0	10
Family medicine	20	18.0	12	6	2
Geriatrics	13	11.7	9	4	0
Internal medicine	40	36.0	30	5	5
Pediatrics	12	10.8	6	5	1
Pediatric subspecialties	4	3.6	3	0	1
Physical medicine and rehabilitation	2	1.8	2	0	0
Other	7	6.3	3	2	2
<b>Total</b>	<b>111</b>	<b>100</b>	<b>66</b>	<b>22</b>	<b>23</b>

Exhibit 14 also presents the number of years of experience in providing patient care by last specialty. There were some notable differences in last specialty prior to their HPM fellowship by fellows’ years of medical practice experience, with internal medicine heavily weighted toward fewer years of experience and emergency medicine heavily weighted toward more years of experience. Internal medicine was significantly more likely to lead to an HPM fellowship before medical practice compared with all other specialties (75% of internal medicine fellows had no prior medical experience versus 51% of others;  $P = .0157$ ), and emergency medicine was significantly more likely to be preceded by at least 5 years of practice before the HPM fellowship than all other specialties (91% of emergency medicine fellows had 5 or more years of experience versus 13% of others;  $P < .001$ ).

To try to assess whether the HPM fellows were new to providing HPM or whether they had prior experience and were, perhaps, improving their 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 (Q1.20)

In your prior position(s) were you providing hospice or palliative care services?	Frequency	Percent
Yes	14	31.1
No	31	68.9
<b>Total</b>	<b>45</b>	<b>100</b>

Of the 45 fellows with prior medical practice, 69% were not providing hospice or palliative care services in that practice, and 31% had been providing hospice or palliative care services before beginning their fellowship. It is not possible to determine from the survey data if HPM had been a focus of or a limited part of their prior work.

### Post-Training Practice

One of the key goals of the survey was to learn more about the work that HPM fellows are entering after completing their training. The survey included a number of questions on this topic, including:

- What will they be doing?
- What settings will they be working in?
- How many hours per week will they be providing HPM services?
- What population will they be focused on?
- What types of areas will they be practicing in?

Another goal was to learn about any systematic differences between HPM fellows, including by sex, IMG status, and the region where they were practicing.

### Principal Activity After Completion of Current Training Program

Of the 108 respondents who answered the question about their post-training plans, 26% were in academic clinician-educator roles, 39% said their principal clinical activity was exclusively in palliative medicine or hospice care, 20% were in a mix of HPM and non-HPM care, and only 4% were in patient care that did not involve HPM (**Exhibit 16**). Five percent were undertaking further training. Based on the response to the question on hours per week providing HPM discussed below, it is clear that many respondents who said they would be working in academic clinician roles will be providing extensive HPM services.

#### Exhibit 16. Principal HPM Activity (Q2.3)

What best describes your principal activity now that you have completed your HPM fellowship program?	Frequency	Percent
Patient Care—Exclusively Palliative Medicine/Hospice	42	38.9
Academic Clinician-Educator	28	25.9
Patient Care—Mixed Palliative Medicine/Hospice and Non-HPM	22	20.4
Additional Subspecialty Training or Fellowship	5	4.6
Patient Care—Exclusively Non-HPM	4	3.7
Undecided/Don't Know Yet	3	2.8
Other	4	3.7
<b>Total</b>	<b>108</b>	<b>100</b>

The survey also asked if they had other activities in addition to their principal HPM activity (**Exhibits 17 and 18**).

#### Exhibit 17. Other Activity (Q2.5)

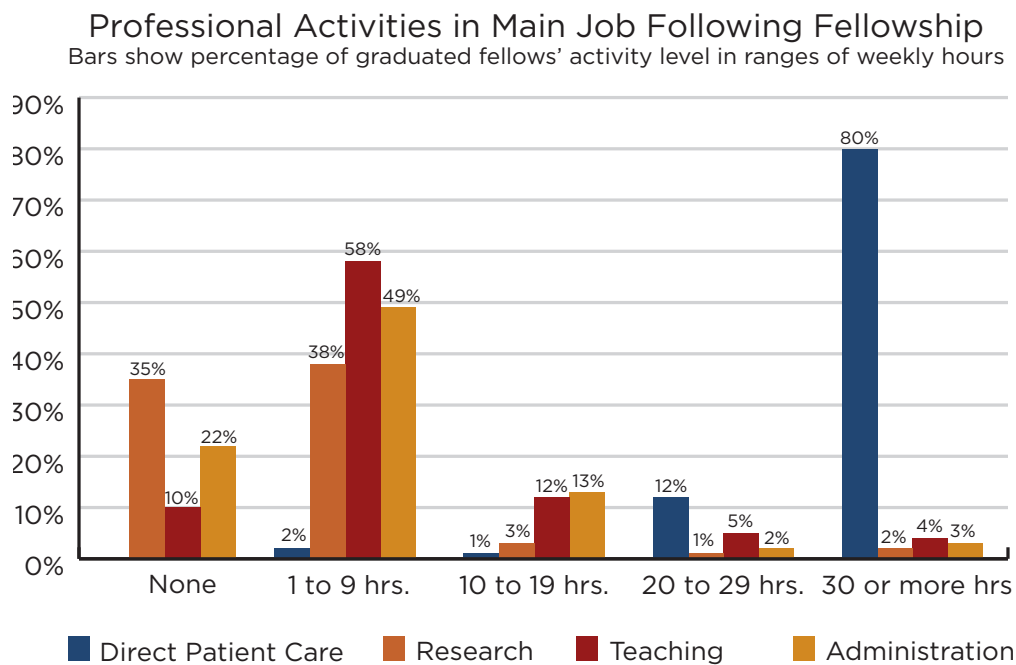
Do you have another type of activity in addition to the one you gave in the last question?	Frequency	Percent
Yes	29	27.1
No	78	72.9
<b>Total</b>	<b>108</b>	<b>100</b>

## Exhibit 18. Other Activity Type (Q2.6)

What best describes your other activity (select only one)?	Frequency	Percent
Academic clinician-educator	12	41.4
Patient care—exclusively palliative medicine/hospice	4	13.8
Patient care—mixed palliative medicine/hospice and non-HPM	4	13.8
Patient care—exclusively non-HPM	2	6.9
Academic researcher	1	3.5
Additional subspecialty training or fellowship	1	3.5
Other	5	17.2
<b>Total</b>	<b>29</b>	<b>100</b>

The survey also included a question about how many hours per week they were providing or planned to provide patient care and non-patient care activities (**Exhibit 19**). Eighty of 95 respondents (84%) who gave information about jobs they had commenced or accepted indicated they would be spending 30 or more hours in direct patient care, with an additional 12 (13%) expecting to spend 20 hours or more in direct patient care. Conversely, only 3 out of 78 (4%) indicated they would be spending 20 or more hours in research, 9 out of 88 (10%) in teaching, and 5 out of 88 (6%) in administration.

## Exhibit 19. Hours in Patient Care and Non-Patient Care Activities (Q3.4)



IMGs reported significantly more (roughly twice as many) teaching hours than USMGs ( $P = .021$ ). We found no other significant differences in the distribution of practice activity between USMG and IMG fellows, male and female fellows, or census regions.

### Practice Setting

Among respondents who provided information about a job they had commenced or accepted in direct patient care ( $n = 95$ ), most (62; 65%) reported that their primary practice would be in a hospital, hospital-affiliated practice, or faculty practice plan (**Exhibit 20**). An additional 6 (6%) reported they would be working in group practices, and 9 (9.5%) reported they would be working in a hospice setting.

## Exhibit 20. Patient Care Setting (Q3.8)

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	43	45
Hospital-affiliated practice	14	15
Hospice	9	9
Veterans Affairs setting	6	6
Multispecialty group practice	5	5
Faculty practice plan	5	5
Single-specialty group practice	1	1
HMO/Managed Care Organization (MCO)	1	1
Medical school	1	1
Community health center	1	1
Other	9	9
<b>Total</b>	<b>95</b>	<b>100</b>

There were no significant differences by gender, US/IMG status, or region, although region 3 (the South region) had a significantly higher proportion of nonhospital practice positions reported (7 out of the 11 nonhospital practice positions were in region 3;  $P = .0163$ ). A map of US census regions is provided in **Appendix 2**.

### Relationship Between Prior Practice and New Practice

Thirty-six of the 45 fellows who had been in medical practice before their fellowship provided information about their previous and future practice setting (**Exhibit 21**). None reported previous practice in hospice care. Most fellows (21 out of 36 respondents; 58.3%) returned to practices similar to those they were in before their fellowship, but the fellowship experience led to a net gain for hospital practice or employment of three fellows, a net gain for hospice care of three fellows, a net loss of one fellow from nonhospital practice, and a net loss of five fellows from all other practice types.

## Exhibit 21. Comparison of Past Versus Future Patient Care Setting (Q1.17 x Q3.8)

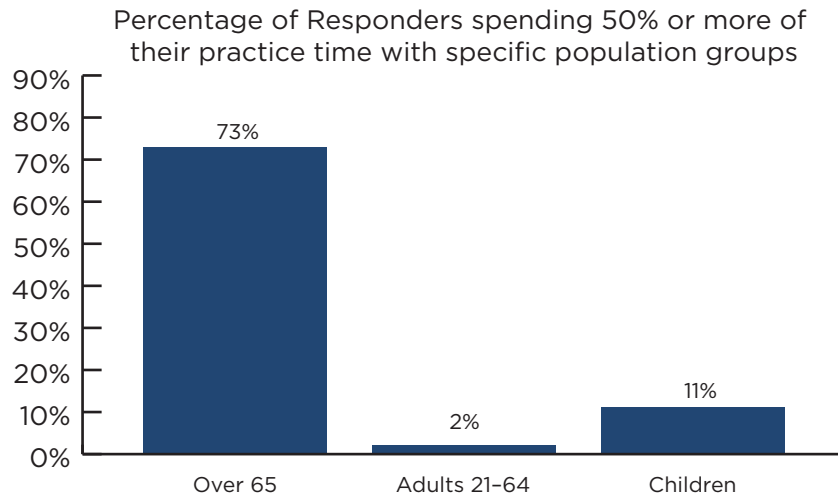
Prior and future practice type reconciliation	Future practice description (Q3.8)				Totals
	Non hospital practice	Hospital practice or employee	Hospice	Other	
<i>Prior practice description (Q1.17)</i>					
Non-hospital solo or group practice	3	3	2	0	8
Hospital-affiliated practice or employee	2	14	1	1	18
Hospice	0	0	0	0	0
Other	2	4	0	4	10
<b>Total</b>	<b>7</b>	<b>21</b>	<b>3</b>	<b>5</b>	<b>36</b>
<b>Net gain (loss)</b>	<b>(1)</b>	<b>3</b>	<b>3</b>	<b>(5)</b>	<b>0</b>

### Age of Patients to Be Served

Sixty-six of 91 respondents (73%) reported that they would spend more than 50% of their time treating patients older than 65 years (**Exhibit 22**). Only 2 (2%) reported they would spend more than 50% of their time with adults aged 21 to 64 years. Ten (12%) reported that they would spend more than 50%

of their time with children, 19 (23%) reported they would spend 25% or less of their time with children, and 54 (65%) reported they would spend none of their time with children.

**Exhibit 22. Age of Patients Respondents Expect to Serve in their Practice (Q3.23)**



**Demographics of Practice Area**

Among respondents who provided information about jobs they had commenced or accepted in patient care, the vast majority (89.6%) planned to work in major city or suburban areas (**Exhibit 23**). Eight percent of fellows planned to work in small cities, and 3% intended to work in rural areas. There were no significant differences by sex or IMG status.

**Exhibit 23. Demographics of Practice Area (Q3.3)**

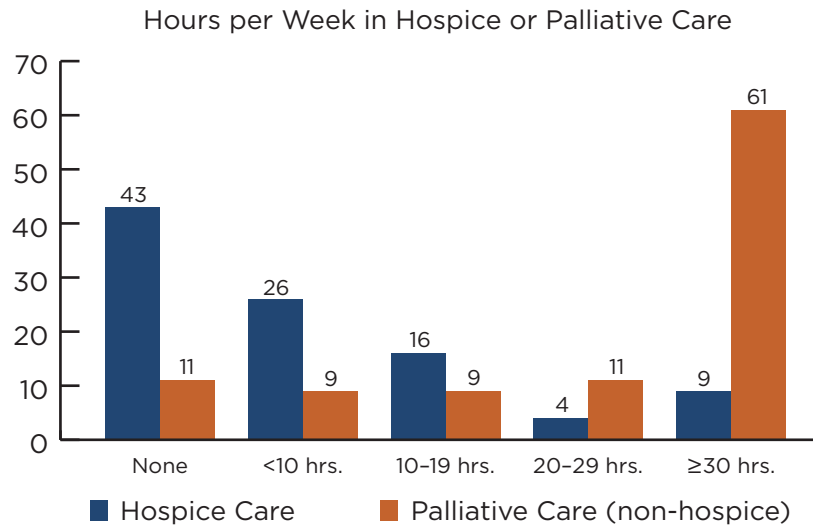
Which best describes the demographics of the principal area in which you are/will be practicing?	Frequency	Percent
Inner city	29	30.2
Other area within major city	36	37.6
Suburban	21	21.9
Small city (population less than 50,000)	7	7.3
Rural	3	3.1
<b>Total</b>	<b>93</b>	<b>100</b>

**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 made it possible to identify physicians who will primarily be providing palliative care services separately from physicians primarily providing hospice services. The following section explores a variety of characteristics of these two groups of physicians.

Of the 93 physicians who reported their weekly hours in patient care activities, 66 (72%) indicated they were spending more than 20 hours per week in palliative medicine, while only 11 fellows (13%) reported 20 hours or more in hospice care (**Exhibit 24**). Seventeen (18%) were not providing more than 20 hours per week in either hospice or palliative care.

## Exhibit 24. Hours in Hospice or non-Hospice Care (Q3.7)



Information the fellows provided about the number of hours they were spending (or expected to spend) in hospice or palliative care practice made it possible to assess differences between those whose work was mainly in hospice care and those who were mainly delivering palliative care. These two groups of fellows differed in three main characteristics: fellows working mainly in palliative care were more likely to be 40 years or younger ( $P = .0310$ ), more likely to have taken their earliest GME in family medicine or pediatrics (not significant), and more likely to have had fewer than 5 years of practice experience before their HPM fellowship ( $P = .025$ ).

In contrast, fellows delivering mainly hospice care were more likely to be older than 40 years, to have taken their earliest GME in emergency medicine (not significant), and to have had 5 or more years of medical experience prior to beginning their HPM fellowship.

Although the results for individual specialties were not significant, the overall patterns of differences between specialties were significant, or almost significant, regardless of how fellows' specialty was defined ( $P = .020$  for earliest GME, see **Exhibit 25**;  $P = .033$  for prior practice specialty;  $P = .054$  for last specialty).

There were some slight differences between those with 20 or more hours in either hospice or palliative care and those with fewer than 20 hours in both areas. This "mixed practice" group was more likely to be very or somewhat dissatisfied with their level of compensation, although this did not reach statistical significance (50% versus 23%;  $P = .19$ ), and more of them reported difficulty finding a position, once again without reaching statistical significance (38% versus 17%;  $P = .128$ ). It was not obvious how these three factors (mixed practice, dissatisfaction with compensation, difficulty finding a position) were related to each other and whether working in a mixed practice was something fellows had desired and sought or was a result of putting together a compromise position after not finding a satisfactory position.

## Exhibit 25. Hours in Hospice or Non-Hospice Care (Q3.7)

Last specialty prior to HPM Fellowship	Fellows with indicated number of weekly hours in patient care			Total
	20+ palliative care	20+ hospice	Neither	
Anesthesiology	0	2	0	2
Emergency medicine	3	2	4	9
Family medicine	15	1	3	19
Geriatrics	9	0	3	12
Internal medicine	24	4	4	32
Pediatrics	8	1	2	11
Physical medicine and rehabilitation	2	0	0	2
Other	4	1	1	6
<b>Total</b>	<b>65</b>	<b>11</b>	<b>17</b>	<b>93</b>

One of the possible career patterns that emerged from this information is the development over time of a career focus on emergency medicine that leads to an HPM fellowship. Another is the path directly from prepractice training in internal medicine or geriatrics that is “crowned” by an HPM fellowship before beginning practice. Although this might suggest that fellows with emergency medicine practice experience were leaning toward hospice care and those with internal medicine or geriatrics training were leaning toward non-hospice palliative care, the analysis of differences between hospice care and non-hospice palliative care did not fully support those conclusions. It was not possible to conclude whether this was because the patterns did not exist or because the number of fellows was too small to reach a clear conclusion.

## The Marketplace: Income and the Job Search Experience

### Expected Incomes

Respondents who had accepted job offers and reported income (n = 95; **Exhibit 26**) expected to earn incomes ranging from less than \$100,000 (6 respondents, 6.3%) to between \$275,000 and \$300,000 (2 respondents, 2.1%). The most frequently reported expected base income categories were \$175,000 to \$199,999 (27 respondents, 28.7%) and \$200,000 to \$224,999 (24 respondents, 25.5%).

### Exhibit 26. Expected Income (Q3.5)

Expected income	Frequency	Percent
Less than \$100,000	6	6.3
\$100,000-\$124,999	2	2.1
\$125,000-\$149,999	5	5.3
\$150,000-\$174,999	19	20.2
\$175,000-\$199,999	27	28.7
\$200,000-\$224,999	24	25.5
\$225,000-\$249,999	8	8.4
\$250,000-\$274,999	1	1.1
\$275,000-\$299,999	2	2.1
<b>Total</b>	<b>94</b>	<b>100.0</b>

The highest average income was in small cities (\$205,000); the lowest was in suburban settings (\$170,000; **Exhibit 27**).

### Exhibit 27. Expected Average Income by Practice Location<sup>10</sup> (Q3.5 x Q3.3)

Practice location	Average total gross income by practice location (\$)
Inner city	196,100
Other area within major city	173,600
Suburban	170,400
Small city (population less than 50,000)	205,400
Rural	195,800
<b>All</b>	<b>183,000</b>

There was little difference in average income between fellows spending most of their time working in a hospice and those spending most of their time in non-hospice palliative care (\$185,000). Those in mixed practice had a lower average income (\$179,000; **Exhibit 28**). Fellows going to work in hospices had the highest expected incomes (\$196,000); those working in group practices (\$171,000) or “other” work settings (\$161,000) had the lowest expected incomes (**Exhibit 29**).

### Exhibit 28. Expected Average Income by Patient Care Focus (Q3.5 x Q3.7)

Patient care focus	Average total gross income by patient care focus (\$)
20+ hours in non-hospice palliative care	185,400
20+ hours hospice care	185,200
20+ hours in neither	178,700
<b>All</b>	<b>184,100</b>

### Exhibit 29. Expected Average Income by Practice Description (Q3.5 x Q3.8)

Practice description	Average total gross income by hospice versus non-hospice setting (\$)
Non-hospital solo or group practice	171,300
Hospital-affiliated practice or employee	188,600
Hospice	195,800
Other	161,100
<b>All</b>	<b>182,200</b>

There was no clear pattern of income by years of medical experience. Fellows without any prior medical experience had similar incomes to those with 5 or more years in practice (around \$184,500). Those with some but limited experience had expected incomes about \$7,500 lower than this (**Exhibit 30**).

<sup>10</sup> Average (mean) income was calculated using the midpoint of the income ranges used in the survey. Average incomes are not adjusted based on hours worked.



### Exhibit 30. Expected Average Income by Years of Experience<sup>11</sup> (Q3.5 x Q3.7)

Years of medical experience	Average total gross income by years of experience (\$)
0 years	184,800
1 to 4 years	177,100
5 or more years	184,600
<b>All</b>	<b>183,300</b>

Respondents in census region 2 (Midwest) reported the highest average expected income (\$202,000), followed by those in region 4 (West, \$194,000). Incomes reported from respondents in regions 1 (Northeast, \$171,000) and 3 (South, \$167,000) were quite a bit lower (**Exhibit 31**). Men reported higher expected average income (\$192,000) than women (\$178,000; **Exhibit 32**). US medical school graduates had higher expected incomes (\$185,000) than international medical school graduates (\$173,000; **Exhibit 33**).

### Exhibit 31. Expected Average Income by Census Region (Q3.5 x Q3.2)

Census region	Average total gross income by census region (\$)
1. Northeast	170,800
2. Midwest	201,800
3. South	167,200
4. West	193,800
<b>All</b>	<b>183,000</b>

### Exhibit 32. Expected Average Income by Sex (Q3.5 x Q5.1)

Sex	Average total gross income by sex (\$)
Male	192,200
Female	177,500
<b>All</b>	<b>183,400</b>

### Exhibit 33. Expected Average Income by US/IMG Status (Q3.5 x Q1.3)

Country of medical education	Average total gross income by IMG status (\$)
USMG	185,200
IMG	173,000
<b>All</b>	<b>182,700</b>

## Job Market Experiences and Perceptions

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

- Male versus female fellows
- USMGs versus IMGs
- Census regions (Northeast, Midwest, South, West).

### Job Search Experiences

We found the following with respect to the 77 fellows who reported their job search experiences.

<sup>11</sup> Income averages given in this and subsequent tables were calculated from midpoints of the \$25,000 income ranges reported in the survey and should be treated only as relatively crude approximations.

**Difficulty finding a satisfactory position (Q4.2).** Fellows' experiences finding a satisfactory position were generally good: 62 (81%) reported no difficulty, while 15 (19%) reported they had difficulty finding a satisfactory practice position (see **Exhibit 34**).

Only one respondent out of 16 graduating from a fellowship in the Northeast region reported difficulty finding a position compared with 14 out of 60 from other regions; the difference was not statistically significant ( $P = .170$ ). We found no statistically significant difference between male and female fellows' reports of difficulty finding a position ( $P = .605$ ); between IMG and USMG fellows' reports of difficulty finding a position ( $P = .272$ ); or across census regions ( $P = .363$ ).

### Exhibit 34. Difficulty Finding a Satisfactory Position (Q4.2)

Did you have difficulty finding a practice position involving HPM that you were satisfied with?	Frequency	Percent
Yes	15	19
No	62	81
<b>Total</b>	<b>77</b>	<b>100</b>

**Reasons for difficulty (Q4.3).** Among the 15 fellows who reported difficulty finding a satisfactory position (**Exhibit 35**), the most frequently cited reasons were lack of jobs or practice opportunities in desired locations (11; 73%]) and undesirable mix of clinical activities (8; 53%]). Lack of jobs or practice opportunities in desired locations was cited as the single most important reason for difficulty by 7 (47%) of the 15. (Respondents could indicate more than one reason.)

### Exhibit 35. Reasons for Difficulty (Q4.3)

Reasons for difficulty	Frequency	Percent*
Lack of jobs/practice opportunities in desired locations	11	73.3
Undesirable mix of clinical activities	8	53.3
Overall lack of jobs/practice opportunities	6	40.0
Lack of jobs/practice opportunities in desired practice setting (e.g., hospital, hospice, etc.)	6	40.0
Inadequate salary/compensation offered	6	40.0
Lack of expert HPM senior mentorship available	6	40.0
Lack of leadership opportunities	5	33.3
Lack of employment opportunities for spouse/partner	2	13.3
Other	2	13.3
Lack of jobs/practice opportunities that meet visa status requirements	1	6.7

\*Percentage is based on number of respondents (15) who gave any response to this question. Respondents could indicate more than one reason.

**Changing plans due to limited practice opportunities (Q4.6).** Only 15 fellows (19% of those who had looked for jobs) reported that they had changed their plans because of limited practice opportunities (**Exhibit 36**). Men were more than twice as likely as women to report changing plans because of practice opportunities, but the difference did not reach statistical significance ( $P = .091$ ). We found no statistically significant differences between IMGs and USMGs in the degree to which fellows changed their plans ( $P = .207$ ). None of the 16 respondents from the Northeast region reported having to change plans because of limited practice opportunities, compared with 19% from region 2, 21% from region 4, and 35% from region 3 reporting difficulties; the difference between the Northeast region and all other regions was statistically significant ( $P = .0167$ ).

### Exhibit 36. Changing Plans Due to Limited Practice Opportunities (Q4.6)

Did you have to change plans due to limited practice opportunities?	Frequency	Percent
Yes	15	19
No	62	81
<b>Total</b>	<b>77</b>	<b>100</b>

**Number of job applications (Q4.7).** Fellows' reports of the numbers of job applications they had completed varied widely from one to more than 10. Eight-six percent applied for up to five jobs while 14% applied for six or more jobs (**Exhibit 37**).

### Exhibit 37. Number of Job Applications (Q4.7)

Number of job applications made	Frequency	Percent*
1	18	23.7
2	14	18.4
3	17	22.4
4	8	10.5
5	8	10.5
6-10	10	13.2
More than 10	1	1.3
Totals	76	100.0

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

We found a statistically significant difference in the number of job applications between IMG and USMG fellows ( $P = .016$ ). IMGs were more likely than USMGs to apply for six or more jobs (42% vs 8%), although patterns were less consistent across the full range of application numbers.

More male than female fellows applied for six or more jobs (55% vs 33%), and the difference was statistically significant ( $P = .0043$ ); a statistically significantly higher proportion of fellows in the Northeast region reported applying for six or more jobs than did fellows in other regions (31% vs 10%;  $P = .0345$ ).

**Number of job offers.** The majority of fellows (86%) reported receiving between one and three job offers, and only one (1%) reported receiving no job offers (**Exhibit 38**).

More men than women received four or more job offers (26% vs 5%), and the difference was statistically significant ( $P = .0131$ ). We found no statistically significant difference in the number of job offers across census regions ( $P = .67$ ) or between IMG and USMG fellows ( $P = .424$ ).

### Exhibit 38. Number of Job Offers (Q4.8)

Number of job offers received	Frequency	Percent
None	1	1.3
1	31	40.8
2	14	18.4
3	20	26.3
4	5	6.6
5	4	5.3
6-10	1	1.3
<b>Totals</b>	<b>76</b>	<b>100.0</b>

## Job Offer Characteristics

Among the 75 fellows who had already accepted job offers, the majority indicated they were satisfied with their salary and compensation (Q4.11). Approximately 33% reported being “very satisfied” with their salary and compensation, and an additional 41% indicated they were “somewhat satisfied.”

More women than men were somewhat or very satisfied with compensation (84% vs 61%), but this difference did not reach statistical significance ( $P = .146$ ). There were no statistically significant differences in satisfaction with salary and compensation between IMGs and USMGs ( $P = .718$ ) or across census regions ( $P = .711$ ).

## Job Market Perceptions

Fellows’ perceptions of local job opportunities were fair: 46% reported that there were no, very few, or few HPM practice opportunities within 50 miles of their training sites (**Exhibit 39**). This may reflect the reality around many medical schools and teaching hospitals, where former fellows have settled.

### Exhibit 39. Job Market Perceptions (Q4.9 and Q4.10)

Job market	Local		National	
	Frequency	Percent	Frequency	Percent
No jobs	2	2.6	0	0
Very few jobs	16	21.3	2	2.6
Few jobs	18	22.7	5	6.6
Some jobs	30	40.0	23	30.3
Many jobs	10	13.3	44	57.9
<b>Total</b>	<b>76</b>	<b>100.0</b>	<b>76</b>	<b>100.0</b>

We found no statistically significant difference in IMG and USMG fellows’ assessments of local practice opportunities ( $P = .12$ ); however, four IMGs (30%) and only six USMGs (10%) reported many jobs locally.

We found no statistically significant differences in local job market perceptions between male and female fellows ( $P = .772$ ) or across census regions ( $P = .292$ ).

HPM fellows perceived national HPM job opportunities much more positively than local opportunities. Eighty-eight percent reported there were some or many HPM practice opportunities nationally.

We also found a statistically significant difference in IMG and USMG fellows’ assessments of national HPM practice opportunities ( $P = .015$ ). USMGs were less likely than IMGs to report that there were very few, few, or some job opportunities available nationally (40% vs 31%), and USMGs were more likely than IMGs to report some or many job opportunities nationally (69% vs 56%). We found no statistically significant differences in national job market perceptions between male and female fellows ( $P = .622$ ) or across census regions ( $P = .509$ ).

Respondents were asked an open-ended question about their perception of the types of positions that were more or less available (**Exhibit 40**). Responses about HPM positions that were more or less available than others usually referenced patient age group (adults and geriatric vs pediatric), hospice versus palliative care positions, or academic versus patient care positions. Hospice positions were reported as much more available (19 “more” responses versus two “less” responses). Pediatric positions were reported as much less available compared with all other groups (one response for “more available” versus eight for “less available”). Twice as many respondents said academic positions were less available than more available (six vs three), and palliative care positions were evenly reported as more or less available (15 responses for each).

## Exhibit 40. Positions More Available and Less Available

Type of position	More available		Less available	
	Frequency	Percent	Frequency	Percent
Hospice	19	45.23	2	5.88
Palliative care	15	35.7	15	44.11
Pediatric positions	1	2.38	8	23.53
Adults and geriatric	4	9.52	0	0
Academic	3	7.14	6	17.65
Other	0	0	3	8.82
<b>Total</b>	<b>42</b>	<b>100</b>	<b>34</b>	<b>100</b>

Note: Number of respondents citing setting or type of position as more or less available on an open-ended question.

### Would You Recommend the Specialty to Others and Why? (Q6.1, Q6.2)

Almost all respondents (105 of the 107 fellows; 98%) who answered this question said they would recommend the specialty to others. The two who indicated they would not recommend the specialty cited reservations that the specialty was appropriate only for certain people—either those who had extensive medical experience or those who were not pursuing pediatric care. In total, 70 of the 112 fellows (63%) took the time to provide a written response to this question, often at length, and overwhelmingly recommended the specialty to others.

The written responses fell into four main categories:

- The fellowship provided them with a new and valuable skillset (especially regarding communicating with patients) and a new outlook on medical care.
- The work is personally satisfying and fulfilling and important.
- HPM is a growing field with likely future practice opportunities.
- The level of compensation is ‘decent’ with a healthy job market.

Some of the comments of the respondents included the following:

- “Allows for development of invaluable skill sets in communication and holistic patient care, which are translatable into any future area of health care.”
- “Palliative care principles can and often should be incorporated into all clinical practice, regardless of specialty.”
- “Formal training in hospice and palliative medicine is extremely beneficial. The advanced techniques for symptom management, communication techniques, and overall clarifications and knowledge of a field where there are many misconceptions were invaluable. The core of what is taught would likely ring true with the reasons many sought a career in medicine in the first place.”
- “It’s a good branch of medicine that teaches you about expressing compassion, empathy, developing good communication skills, and helping terminally ill patients.”
- “It is a great field that combines both compassionate psychosocial and communications skills with scientific rigor and interest in doing the most human thing, prevention of suffering.”
- “I found that my hospice and palliative training presented a privileged opportunity to learn how to better interact with, relate to, and understand other people.”
- “Hospice and palliative medicine training was one of the best things I ever did. It gave me an opportunity to learn from pioneering faculty. It allowed me the space to grow as a person and as a clinician. I utilize skills learned from fellowship in my professional work and in my personal life. In turn, that has improved my quality of life.”

- “I recommend hospice and palliative medicine because I love it. I love the patient population, the medicine, and caring for both the patients and the families. I love working in an interdisciplinary model. I do not believe it is for everyone, but for those that this work is for, it is amazing work.”
- “It is highly rewarding. It can make a huge difference in a family’s life to have their most stressful time during serious medical illness be made better by having their wishes clearly identified and known, then acted on, especially in an environment where many physicians are uncomfortable with death and dying.”
- “There is no more rewarding field I have found than the one in which you counsel, educate, and empower patients to take control of the end of their lives. We help people write the end of their stories, and we help the survivors carry the narrative away from the grave.”
- “Satisfying field of medicine with substantial opportunity for growth/expansion in the future.”
- “Growing field and currently an unmet need in advanced disease management.”
- “Expanding field with lot of new opportunities. The field is rapidly moving toward becoming cutting edge. Great job satisfaction; care focus is patient and not disease; reasonably well compensated field.”

## Conclusion

The class of 2014–2015 HPM fellows, as represented by the 112 respondents to this survey, seem to be very pleased with their new specialty and with their immediate employment path following fellowship. Respondent comments about whether to recommend the specialty to others were almost entirely enthusiastic, heartfelt, and optimistic about finding fulfillment in the work. Overall, respondents felt that the national job market offered many opportunities, especially in hospice, and almost all found acceptable jobs following fellowship, mostly with compensation they found very or somewhat satisfactory. Of the 15 fellows who reported difficulty finding a satisfactory position, desired location was the most frequently cited reason for difficulty. Fellows who graduated from programs in the South region (region 3) had the highest rate (35%) of changing their plans because of limited job opportunities. The South region also had the lowest average incomes.

Most respondents (89%) are or will be working primarily in direct patient care. It is noteworthy that this includes 26% of respondents who said their principal activity would be as an academic clinician-educator. About 20% have a mix of HPM and non-HPM clinical care. Whether this 20% represents inefficiency in using the HPM specialty capacity of the graduates or if it is a conscious choice on the part of the graduates to maintain other specialty skills in other areas or build bridges between HPM and other specialties, is unknown at this point. There did appear to be an association between fellows who were less satisfied with their job opportunities and those who were mixing responsibilities in hospice and palliative medicine, but the direction of that association is unclear.

Most respondents (72%) are spending 20 hours or more weekly in palliative care, while only 14% expected to spend 20 hours or more weekly in hospice. Given that fellows reported plentiful job opportunities in hospice, it appears that graduates are acting on a preference for hospital-based palliative care over hospice care. Compensation does not appear to be the driving factor in this choice, as compensation was equivalent between those working mostly in hospice versus mostly in palliative care. In fact, physicians working directly for hospice had higher incomes.

A notable observation about this class of HPM fellows is the significant proportion that had substantial experience as physicians prior to entering fellowship: 21% of fellows had more than 5 years of medical practice experience, and 11% had more than 10 years. This means that this group of HPM graduates enters HPM practice with skills and experience beyond the norm for most graduating fellows. It

also means the likely number of years these physicians will work in HPM may be less than for younger physicians, which has an impact on the overall long-term workforce capacity.

The survey of the HPM class of 2014–2015 provides very important insights as to the current supply and demand for hospice and palliative care. The survey also provides a critical baseline to compare with the results of future surveys of HPM physicians entering the specialty. This information will inform the HPM community and policy makers about the workforce trends affecting the delivery of hospice and palliative care.

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

### Exhibit 41. Sex—HPM Fellow Survey

Sex	Frequency	Percent
Female	67	62.6
Male	40	37.4
<b>Total</b>	<b>107</b>	<b>100</b>

### Exhibit 42. Sex—ACGME Fellow Data

Sex	Frequency	Percent
Female	151	62.4
Male	91	37.6
<b>Total</b>	<b>930</b>	<b>100</b>

### Exhibit 43. IMG Status—HPM Fellow Survey

IMG Status	Frequency	Percent
USMG	86	77.5
IMG	25	22.5
<b>Total</b>	<b>111</b>	<b>100</b>

### Exhibit 44. IMG Status—ACGME Fellow Data

IMG Status	Frequency	Percent
USMG (MD + DO)	182	74.9
IMG	60	24.7
Canada	1	0.4
<b>Total</b>	<b>243</b>	<b>100</b>

### Exhibit 45. Race—HPM Fellow Survey

Race	Frequency	Percent
American Indian	0	0
Asian and Pacific Islander	24	23.1
Black	6	5.7
White	72	69.2
Other	2	1.9
<b>Total</b>	<b>104</b>	<b>100</b>

### Exhibit 46. Race—ACGME Fellow Data

Race/Ethnicity <sup>†</sup>	Frequency	Percent
African American	15	6.8
Asian	49	22.2
Hispanic*	14	6.3
Native American	0	0
White	132	59.7
Other	11	5.0
<b>Total</b>	<b>221</b>	<b>100.0</b>

<sup>†</sup> We excluded individuals with unknown race/ethnicity in calculations from the ACGME data for consistency with the GW survey table.

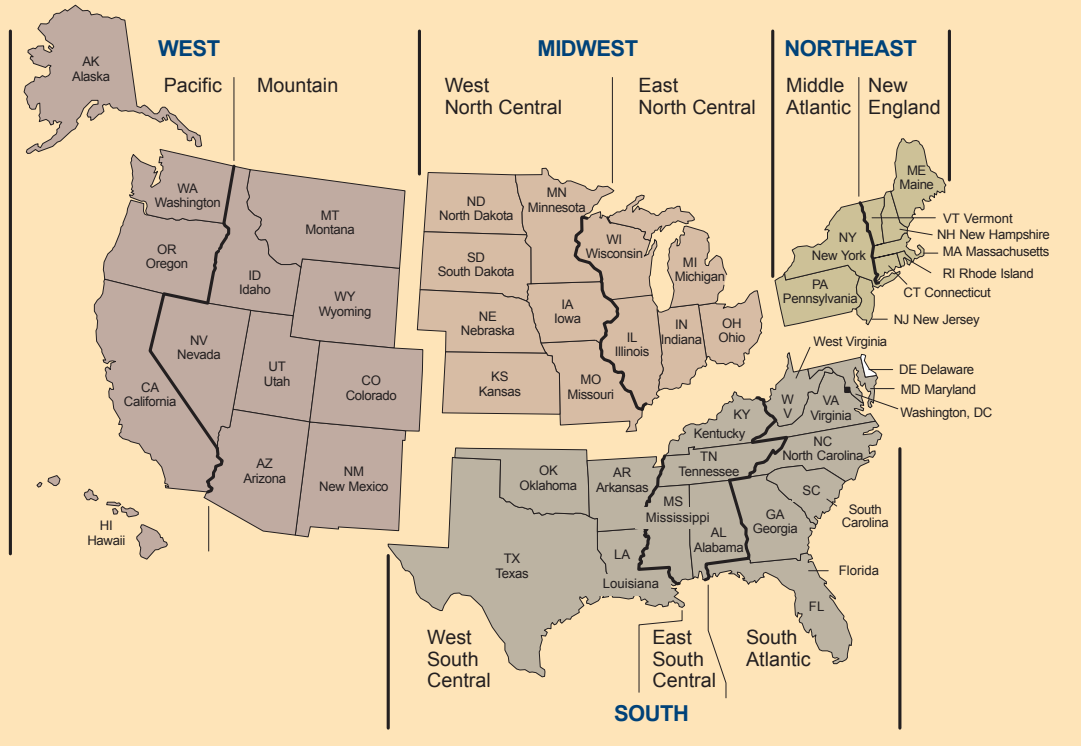
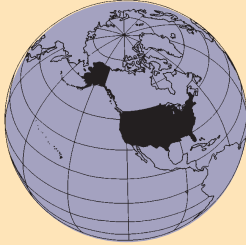
\* While we use separate race and ethnicity measures in the HPM Fellow Survey, "Hispanic" is included within a single Race/Ethnicity measure in the ACGME data.



## 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