



AMERICAN ACADEMY OF  
HOSPICE AND PALLIATIVE MEDICINE

# **HPM Fellowship Program Directors' Guide**

A Resource Guide for Starting and Running a  
Hospice and Palliative Medicine Fellowship Program

# Contents

HPM Fellowship Program Directors’ Resource Guide Authors.....	3
Starting a New Hospice and Palliative Medicine Fellowship .....	4
Making the Case for a Fellowship at Your Institution.....	4
Finding Funding and Supported Time .....	5
Planning for a Fellowship.....	5
Obtaining ACGME Program Accreditation.....	6
Program Director Networking and Peer Mentorship .....	8
Running a Fellowship.....	9
HPM Match Participation.....	9
Onboarding New Fellows.....	11
Evaluation .....	12
Preparation for the End of the Fellowship Year .....	13
Special Considerations .....	14
Educational Resources .....	17
Scholarly Activities .....	20
ACGME Considerations .....	21
Appendix One.....	25
References .....	26

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## Starting a New Hospice and Palliative Medicine Fellowship

There are many steps to building and running a hospice and palliative medicine (HPM) fellowship. The first portion of this guide reviews the main phases in creating a program, including making the case, finding funding, obtaining Accreditation Council for Graduate Medical Education (ACGME) accreditation, and finding peer support.

### Making the Case for a Fellowship at Your Institution

- **The Clinical Need:** There is a growing need for specialty-trained HPM physicians. As effective treatments for many illnesses emerge and life expectancy increases, we are confronted with great numbers of people with chronic, debilitating, and life-limiting illnesses, as outlined in the National Academies of Sciences, Engineering, and Medicine report “Dying in America,”<sup>1</sup> a consensus report from the Institute of Medicine. The current healthcare workforce is not equipped to address the symptoms, care coordination, and psychosocial needs of seriously ill patients and their families. A growing evidence base demonstrates that specialty palliative care, as delivered through inpatient or outpatient consultation services or a dedicated inpatient unit, improves both the quality of care<sup>2-4</sup> and the cost effectiveness of care for adult and pediatric<sup>5,6</sup> patients especially when provided early in the course of illness.<sup>7-15</sup> Hospice care has also been shown to improve quality of care, reduce hospitalizations, and reduce costs.<sup>16,17</sup>
- **The Educational Need:** Palliative care education is lacking in most medical curricula.<sup>1,18</sup> National surveys of medical students, residents, faculty, and deans demonstrate widespread deficiencies and discomfort with basic palliative care competencies, as well as little exposure to hospice—and palliative care—related educational experiences.<sup>19,20</sup> In a national survey of practicing physicians, two-thirds stated that they felt inadequately prepared to manage chronic pain, educate patients with chronic conditions, manage psychological and social aspects of chronic care, and provide end-of-life care.<sup>21</sup> Improvements in palliative care education cannot occur without specialty-trained faculty to teach these competencies.<sup>22</sup>
- **The Research Need:** Several reports from the National Institutes of Health<sup>23</sup> and the National Academies of Sciences, Engineering, and Medicine<sup>24</sup> have called for substantial investments in palliative care research. Although the growth of the field has been remarkable, the knowledge base to support basic elements of clinical practice still remains inadequate. The National Quality Forum Priority Partners identified end-of-life care as an under-researched area critical to achieving systemic improvement in health care.<sup>25</sup> With the massive investment in patient-centered outcomes research and Comparative Effectiveness Research (CER), more research teams with palliative care and hospice expertise—including specialty-trained HPM physicians—are needed.
- **The Workforce Need:** The need for hospice and palliative care services is growing rapidly. Since 2008, member boards of [ABMS](#) and [AOA](#) have certified [a growing number](#) of physicians in the



specialty-level practice of HPM, but the current workforce is not large enough to meet the demand. HPM fellowships are the only pathway to building the much-needed supply of HPM experts. See the [AAHPM workforce webpage](#) for more specific information describing the current state of the workforce shortage.

## Finding Funding and Supported Time

- **Fellowship Funding Guide**

One of the first steps in fellowship planning is creating a budget. Beyond fellow salary and benefits, budgets should include operating costs such as administrative fees (eg, ACGME, National Resident Matching Program [NRMP], etc.), recruitment costs (eg, meals for interview days), books and equipment, and other educational experiences such as communication training.

Every HPM fellowship is funded differently depending on a number of factors, including the nature of the program, number of trainees, access to potential donors, and staff and resources available to support the initiative. The [AAHPM Fellowship Funding Guide](#) is a resource that includes practical tips to find sources of funding for your fellowship program.

- **Supported Time**

Establishing paid, dedicated time for the fellowship director and coordinator is closely linked to program funding and also requires a financial commitment from involved institutions. According to the ACGME Program Requirements, the program director must have 20%-50% protected time for the administrative activities of the program, depending on the number of fellows. This time is separate from clinical supervision of fellows and may include teaching, curriculum development, faculty development, budgeting, recruitment, and day-to-day administration.

## Planning for a Fellowship

Fellowship programs must be ACGME-accredited for their graduates to be eligible take the HPM board examination. Here are some of the key steps to take before applying for ACGME accreditation:

- Review the [ACGME Common Program Requirements](#), which describe the key features required for effective clinical learning environments.
- Review the [ACGME Program Requirements for Graduate Medical Education in Hospice and Palliative Medicine](#) and ensure your program can meet these. Many programs exceed the requirements in a number of areas.
- Review the [Frequently Asked Questions: Hospice and Palliative Medicine, ACGME](#).
- Generate a brief proposal for your program, including a draft clinical rotation schedule.



- Meet with your institution’s Designated Institutional Official (DIO – person who oversees all graduate medical education [GME]) to present your proposal and learn about next steps. Your GME office may have an internal application process to obtain approval from the Graduate Medical Education Committee (GMEC). Your program must be approved by your institution’s GMEC prior to submitting an application to ACGME.
- Identify a program coordinator early in the process, ideally someone with prior experience coordinating other GME programs who can help shepherd your program through the many regulatory requirements and processes. Be sure to negotiate dedicated time for your coordinator with their supervisor.
- Plan your program leadership structure. Fellowship programs must have a director, a coordinator, and site directors for the major clinical sites. Larger programs may also have an associate director. There may also be more complicated leadership structures for programs with added components, such as separate adult medicine and pediatric tracks, combined HPM/geriatrics programs, or interprofessional programs.
- Identify and build partnerships for the major fellowship requirements, listed below as of 2019. Of note, fellows need to see at least 100 new patients over the course of the program and follow at least 10 patients longitudinally across different settings (eg, inpatient to outpatient clinic).
  - Inpatient acute care (minimum 4 months)
  - Long-term care (minimum 1 month or 100 hours)
  - Hospice (minimum 2½ months/at least 25 home hospice visits)
  - Ambulatory practice (for at least 6 months)
  - Pediatric palliative care, hospice, or both (of note, the requirements do not specify an amount of pediatric exposure)

## **Obtaining ACGME Program Accreditation**

The initial ACGME application process has multiple steps, described below. Upon review of the application, the ACGME will determine if initial accreditation is withheld or provided for one or two years. The initial ACGME application does not require a site visit. If accreditation is withheld, a program can reapply but will have to pay the application fee again. If reapplication occurs within 2 years, citations given by ACGME on the previous application must be addressed as part of the reapplication and a site visit will occur prior to reconsideration for initial accreditation. ACGME approves your complement (number of fellows) based on appropriate number and strength of faculty as well as strength of curriculum and required clinical experiences. You may apply for a larger complement than you have funding for if your GME office will allow it, as you are not required to completely fill your accredited complement. Of note, you cannot increase your complement during the initial accreditation period.

Therefore, if you expect your program to grow within the first couple of years, it is important to apply for the largest number of fellow positions possible during the initial accreditation application.

- **Submission Cycles**

There are different submission cycle dates depending on which accredited core residency program you are applying under (internal medicine, family medicine, or pediatrics). The Review Committees meet three times each year to review new program applications. Of note, if you want to enter into the Match in a given year, you need to obtain ACGME approval before the Electronic Residency Application Service (ERAS) and the Match open that year.

ACGME submission dates are at the bottom of each webpage:

- Internal Medicine Review Committee: As of 2020, materials due in July, November, and January. Visit [ACGME Internal Medicine for application submission deadlines](#).
- Family Medicine Review Committee: As of 2020, materials due in July. Visit [ACGME Family Medicine for application submission deadlines](#).
- Pediatric Review Committee: As of 2020, materials due in July, November, February, and July. Visit [ACGME Pediatrics for application submission deadlines](#).

- **New Program Accreditation Process**

The ACGME document, [Frequently Asked Questions about the Accreditation of New Programs and Sponsoring Institutions, Program Mergers, and Changes in Sponsorship](#), details the process for the accreditation of new programs. In addition, the short video [How to Complete a Program Application for ACGME Accreditation](#) is helpful.

- Fellowship Application  
[Instructions for New Fellowship Program Applications](#) lists the components of the fellowship application. Spend some time reviewing the complete list in this link so you know what you will need to gather for the final application. Your program coordinator and your DIO's office will help gather all of the documents needed for the final submission, but you will review each of them. Some of the major components are listed here:
  - [New Application: Hospice and Palliative Medicine, ACGME Application](#). This is where you build the case for your program, including providing information about program resources, your curriculum, and the educational program. You should ask to see a few examples of these from other HPM programs (see [networking and peer mentorship](#) below). Although the application does not require a lot of details about your curriculum, other than that you provide the major building blocks (eg, required rotations, a quality improvement project, journal club), you will need to provide specific examples of how you will meet certain learning objectives.
  - The application requires a list of all the evaluation tools you will use for the program (see [evaluation](#) below for more details).

- The application requires you to provide specific policies (eg, duty hours, supervision, moonlighting). Ask your GME office which policies are institution specific. Consider asking for templates from other program directors in your institution.

## Program Director Networking and Peer Mentorship

It is important to build a network of mentors, including experienced program directors, other new program directors, other program directors in your geographic area, and program directors of programs similar to yours (ie, large, small, pediatric, etc.) to provide information and support throughout your fellowship application process and beyond. Here are some ways to connect with colleagues:

- Attend the [Annual Assembly of Hospice and Palliative Care](#) Fellowship Directors Forum (preconference program).
- Join the discussion on [AAHPM Connect](#) and the Fellowship Directors Special Interest Group.
- Participate in [AAHPM Mentor Match](#), an online networking and career enhancement tool that will help you find and connect with other participants in the program. The program is open to AAHPM members who are in any stage of their career and looking to make connections with other members.



## Running a Fellowship

### HPM Match Participation

HPM fellowships participate in the NRMP Medical Specialties Matching Program (MSMP). The MSMP is specific to ACGME-accredited fellowship programs and includes internal medicine specialties, allergy and immunology, and geriatrics. All HPM fellowship programs are strongly encouraged to participate in the Match with 100% of their funded positions. The HPM Fellowship Match webpage includes links to [NRMP and ERAS resources and registration materials](#).

AAHPM serves as the NRMP HPM Sponsoring Organization. In order for HPM Fellowship Programs to continue to participate in the Match, AAHPM must enter into an annual “NRMP Participation Agreement,” affirming that at least 75% of the programs have agreed to participate in the Match and that the program directors will register at least 75% of the available fellowship positions for the Match in any given year. To do so, each spring, the Academy reaches out to all HPM program directors requesting completion of a Match participation form. The participation form is an online questionnaire and can be completed by the program director or program coordinator. As the Match Sponsoring Organization, AAHPM does not provide application services to the programs or have any responsibility for individual fellowship agreements.

- **Electronic Residency Application Service (ERAS)**

HPM fellowship programs use [ERAS](#), offered by the Association of American Medical Colleges (AAMC) to streamline the application process. Programs can register with ERAS in April. Programs must complete registration to receive ERAS news and updates as well as to indicate their participation status for the upcoming season. Beginning in mid-July, fellowship programs start receiving applications. Recruitment season continues through October. Visit [HPM Fellowship Match](#) for links to ERAS Policies and FAQs.

- **NRMP MSMP**

Visit [HPM Fellowship Match](#) for the MSMP Participation Timeline and links to Match processes and policies. All programs new to the Match are asked to complete the New Program Form. Visit [Basics for New Fellowship Programs participating in the Match](#) for more information. If your program or institution has previously registered, visit [Introduction to Fellowship Matches](#) and using the Fellowship drop-down menu, select ‘Programs’ or ‘Institutions’ for registration and Match details.

- **Reviewing Fellowship Applications and Interviewing**

By signing the NRMP Match Participation Agreement, DIOs and programs directors are responsible for ensuring all staff involved in the interview and matching processes adhere to NRMP policies and code of conduct. NRMP offers [several resources](#) that highlight policies, procedures, and tips relating to reviewing applications and interviewing.



Programs have found that standardizing their interview process has enabled more objective and reliable approaches to the Match. One approach is to create a recruitment committee including key faculty and team members. Using a consistent group from year to year provides more reliable evaluations of applicants.

Each program should consider which qualities are most valued in fellows and incorporate these questions into the interview process. “Behavioral Interviewing” is a practice of crafting questions to assess how an applicant might behave in certain situations. Consider asking applicants how they would handle situations that involve disagreement, feedback, discouragement, or working as a team member. A standard weighting can be added to these questions to allow for more direct comparison between diverse applicants.

Programs need to be mindful of avoiding discrimination and bias. Questions about age, gender, religion, family status, race, pregnancy, veteran status, disability, national origin, and sexual orientation do not have a place in the interview process and can be illegal. Programs can help foster awareness of unconscious bias by providing opportunities for professional development for interviewers and by encouraging reflection and feedback throughout the interview process. One resource is [Project Implicit](#) at Harvard, a research and education initiative that provides free online assessment of unconscious bias.

However, efforts to address unconscious bias are not meant to erase differences between applicants. In fact, the recruitment process should pay special attention to groups that are under-represented in medicine. These groups vary regionally; the GME office can tell you which groups are under-represented in your area. The AAMC recommends holistic review, which “is a flexible, individualized way of assessing an applicant’s capabilities by which balanced consideration is given to experiences, attributes, and academic metrics and, when considered in combination, how the individual might contribute value as a medical student and physician.”<sup>26</sup>

After interviews are completed, the committee should meet to create a rank list. This process may require several hours and more than one meeting, depending on the number of interviews and the level of agreement between interviewers. When considering candidates near the bottom of the rank list, consider whether the program would prefer to train the applicant or have an unfilled spot.

Programs should be compliant with the NRMP regulations when communicating with applicants. Programs should not make promises of spots to candidates or give applicants their specific rank, even if the applicant will be ranked highly. This type of communication is considered coercive by NRMP and carries consequences. Programs should not tell applicants, “We are ranking you to match in our program,” or, “You are our first choice for this position.” Instead, a program could tell an applicant, “We feel that you would fit in well with our program,” or, “We hope we have the opportunity to work with you in the coming academic year.” Programs should not imply that a second look or post-interview communications are expected or required. Consult the NRMP

webpage on [reviewing fellowship applications and interviewing](#) and work with your program staff to craft an appropriate message.

- **Match Day**

Prior to Match Day, all programs should review and update program contact information in the [NRMP Registration, Ranking, and Results \(R3\)](#) system to ensure unmatched applicants can contact the program in the event there are unfilled positions after the matching algorithm is processed. At 12:00 pm ET on Match Day, programs can log in to the R3 system to learn if all positions were filled and to access the program's Confidential Roster of Matched Applicants and other Match reports. Program contacts will also receive an email notification.

- Unfilled Programs

- Unofficial Scramble

Programs with unfilled positions can view the List of Unmatched Applicants and begin contacting them about a position. As positions are filled or if the program chooses not to fill them, update the 'Current Unfilled' positions for the program via the R3 system so applicants can see how many positions are available in the program. For instructions, review the NRMP support guide, [Updating Unfilled Positions](#).

- Reach out to your constituents on [AAHPM Connect, Fellowship Directors SIG](#) asking for referrals.

- [AAHPM Job Mart](#): AAHPM offers complimentary fellowship posting on the Job Mart following Match Day to ensure the maximum number of fellowship slots are filled each year. This complimentary offering is available through April. To qualify for a posting at no cost during this time period you must include 'Fellowship' in the job title and for Type select 'Fellowship.'

- Post-Match Assessment

Many programs find it useful to follow up with applicants after the Match, including applicants who did not match in their programs. Both the University of Pittsburgh and the University of California, San Francisco have been generous in sharing their HPM Applicant Post-Match Questionnaire on AAHPM Connect. Consider asking applicants about any combination of the following: impressions of the program before the interview day, impressions during the interview day, connections after the interview day, reasons for concern or hesitation about the program, opportunities to improve the program, or reasons for selecting the program that they matched with.

## Onboarding New Fellows

The onboarding process is important; it sets the tone for year and builds your relationship with the fellows. Make sure to collaborate with your GME office to follow local processes. Creating a document that enables the process to progress smoothly can be helpful (for a sample, see Appendix One: [Checklist](#))



[After Acceptance](#)). Usually, the process starts with a welcome phone call from the program director. At larger programs, the GME office may handle many of the tasks associated with the initial steps to get the fellows connected to the appropriate departments for credentialing, human resources, etc. Appendix One spells out the process for smaller programs in case a more hands-on approach is required. In addition to this list, programs should make sure fellows are entered into the residency management software such as New Innovations, Advanced informatics, MedHub, etc. The program coordinator should check in with the new fellows regularly to make sure they are on track, especially in obtaining a medical license and Drug Enforcement Administration (DEA) certificate. GME offices also may provide relocation resources, such as connections to low-cost housing. Many programs also host a formal welcome social event so that fellows can meet faculty and staff.

## Evaluation

The ACGME sets strict criteria for evaluations of fellows, faculty, and the program itself. The following includes HPM-specific information and resources:

- **Fellow Evaluation**

Per the [HPM fellowship program requirements](#) there must be formative and summative evaluations performed throughout the fellowship year.

- The formative evaluation process requires the following:
  - objective assessments of competence in patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice based on specialty-specific milestones. Refer to the [Toolkit of Assessment Methods](#) for examples of objective assessments.
  - multiple evaluators (eg, faculty, peers, patients, self, and other professional staff)
  - documentation of discussion of the semiannual evaluation of performance with feedback with each fellow.
- The summative evaluation process requires the following:
  - use of [specialty-specific milestones](#) to ensure the fellow is able to practice core professional activities without supervision
  - documentation of the fellow's performance throughout their education and verification that the fellow has demonstrated sufficient competence to enter practice without direct supervision
  - documentation that is included in the fellow's permanent record maintained by the institution, accessible for review by the fellow in accordance with institutional policy.
- Clinical Competency Committee: To oversee fellows' development, a Clinical Competency Committee (CCC) must be created to review the fellows' performance and make decisions about their progress and areas for improvement. This includes the preparation and submission of the specialty-specific milestones to the ACGME. Be sure to review the [ACGME Clinical Competency](#)

[Committees: A Guidebook for Programs \(2<sup>nd</sup> Edition\)](#) and [ACGME Frequently Asked Questions: Milestones](#).

- Designing and selecting assessment instruments: It can be helpful to review [Designing and Selecting Assessment Instruments: Focusing on Competencies](#) by Stanley J. Hamstra, PhD to learn more about different criteria used to select assessment instruments, how to identify instruments for summative and formative purposes, and what approach to use in drafting a new instrument. Please see the section on [Educational Resources](#) below for more information about assessment tools.
- **Program Evaluation**

The ACGME requires programs to have a program review committee that meets at least annually to review the curriculum, formally evaluate the program and provide feedback via a formal program evaluation document. Refer to the [ACGME Frequently Asking Questions: Milestones](#) for specific requirements.
- **Faculty Evaluation**

Evaluation of faculty is required at least annually. This should include a review of the faculty’s clinical teaching abilities, commitment to the educational program, clinical knowledge, professionalism, and scholarly activities.

## Preparation for the End of the Fellowship Year

- **Board Eligibility**

Use the [AAHPM Primary Board Contact Sheet](#) to learn more about what each primary specialty board requires for verification of training and certification. Share this information with your fellows. Of note, the HPM initial certification board exam is offered every other year (during even years) and administered by the [American Board of Internal Medicine \(ABIM\)](#).
- **Certifying for Graduation**

Complete and submit the end-of-year summative milestone evaluation and make sure the fellow has completed all the requirements required for graduation. Ensure that the final summative evaluations include the language documenting the fellow’s performance during their education and verifies that the fellow “has demonstrated sufficient competence to enter practice without direct supervision.” Programs can be cited by ACGME if this specific language is not utilized in the summative evaluation. Most programs hold a formal graduation ceremony where graduates receive a diploma for completion of the fellowship program.

- **Career and Job Counseling**

Career and job counseling should begin early and continue throughout the year as fellows better define their interests and potential career avenues. Collaborate with your GME office and other programs to incorporate this content into the curriculum of the program. Topics include salary and benefit negotiations, creating a curriculum vitae, contracts review, and differences between academic and community settings.

## Special Considerations

- **Fellows Re-Entering Training or with Limited Inpatient Medicine Experience**

The field of HPM has a long tradition of welcoming providers from diverse fields and backgrounds. Although this inclusive approach has made the field stronger, there are certain considerations that program directors should keep in mind when trying to provide the best educational experience possible to a diverse group.

- The transition from teacher to learner or expert to novice is a difficult transition for many mid- or late-career fellows. Fellowship directors can help in these transitions by keeping the lines of communication open, establishing clear expectations, following best practices for feedback, and giving fellows opportunities to function as both learner and teacher.
- The transition from a field with a culture different from HPM can be difficult. Consider additional coaching for those who come from fields where communication and teamwork are less emphasized in favor of individual performance.
- The transition to inpatient practice can be difficult for applicants who have been practicing medicine in ambulatory settings for some time. A thorough orientation followed by frequent check-ins during the first inpatient month may have significant benefit in helping the fellow establish a comfortable workflow.

- **Fellow Illness and Inability to Work**

A variety of situations, such as illness or family circumstances, may hinder a fellow's progress during the year. Fellows might be unable to accept a position, request deferral or delay in starting, or require a leave of absence. Programs should reach out to their GME office, their DIO, and any other governing body (such as the NRMP) for assistance. The NRMP is vital in the situation in which a fellow cannot take the matched spot as the program cannot legally look for a replacement fellow until approval and "release from contract" for the fellow. Fellows should be connected with the Employee Assistance Program (EAP) and other resources for wellness and resilience as they navigate their specific situations.

- **Fellows Needing Remediation**

In rare circumstances, fellows need remediation. The driving motivation in this process must be for programs to 1) help all trainees achieve their potential and 2) graduate competent palliative

medicine physicians. The process can be sensitive; in some cases, programs should involve the GME office, DIO, and sometimes the GME legal office as they create a remediation plan. Program directors should approach a struggling learner with remediation — and not punishment — as the clearly stated goal, and programs should always offer resources such as the EAP for extra support. Often, the need for remediation is identified first by faculty rather than the program director; to the extent possible, full information from these parties should be collected in writing. Program directors should also ensure that the original faculty member gives feedback about the concerns to the fellow whenever possible. When a remediation plan is put into place, it should outline clear expectations, timelines, metrics, and contingency plans. Remediation is often a stressful process for all involved, and clear communication and documentation are critically important. Of note, if a fellow is not showing progress on a remediation plan, or refuses to engage in the plan, documentation is crucial for proceeding with termination of a fellow.

- **Interprofessional Fellowships**

There is growing recognition of the importance of interprofessional education in health care, and especially in fields like HPM. As a result, increasing numbers of palliative care fellowships are integrating training for several disciplines, including medicine, nursing, social work, chaplaincy, and pharmacy. Unsurprisingly, the logistical and pedagogical considerations can be complicated. Before embarking on building an interprofessional fellowship program or adding trainees from other disciplines to a physician fellowship, it is advisable to [consult with other program directors who have done so already](#).

**Specific Issues Relating to Fellowship Size:**

- Small Fellowships
  - Learning: The important role that didactics play in fellow education may need to be adjusted for smaller fellowships. Individual attention for learners is important, but it can also be inefficient to have only 1:1 teaching with faculty. Small programs should explore collaborating with other programs (eg, residency programs, other fellowships) for didactics where appropriate. The GMEC can help to identify potential partners.
  - Camaraderie: Exposure to other fellows and their work can help normalize the fellowship experience, provide emotional support to learners, and instruct co-fellows in a way that interaction with faculty does not. If a program is small, it may consider fostering a sense of community with other fellowship programs within HPM through video conferencing, contact with other local programs, or in-person conferences such as the [Annual Assembly of Hospice and Palliative Care](#).
  - Group dynamics: Working with a small faculty guarantees that the fellows will know their faculty well. It also heightens the need for good communication and feedback. If discord develops in a small program it can have an outsized effect of the faculty's and fellows' experience.

- Large Fellowships
  - Learning: As programs grow and the number of sites for learners expands, arranging education time that works for all rotations can become a challenge. The program leadership will need to closely examine schedules and respectfully communicate with those who are providing the clinical experience to find a schedule that works.
  - Rotations/workload: Cultivating enough rotations to support all learners can be a challenge in a large program. Having an open dialogue with the various rotations and the fellows who rotate will help fellowships continuously improve. Ask site directors how many learners should be assigned at any one time. Ask learners if they feel their workload is appropriate and if the experience is providing valuable learning.
  - Mentorship: Providing individual attention and mentorship is one of the most important and highly valued parts of fellowship training. Larger programs should take extra care to help fellows find formal and informal mentors.
  
- **Issues Specific to Pediatric Palliative Care Programs/Fellows**
  - Exam preparation: Although significant overlap exists between adult and pediatric palliative care, program directors and learners should be aware that board exams for HPM are mostly testing knowledge of adult patients. With this in mind, directors of pediatric-focused programs may choose to dedicate a significant portion of didactics, clinical experience, or both to working with adult patients. Alternatively, some program directors have chosen to focus on pediatrics during the fellowship and encourage participation in a board preparation course for their pediatric fellows. There is currently no data on which approach is superior.
  - Curriculum design: The ACGME allows for significant flexibility in curriculum design. For example, because pediatric hospice has less availability in most regions, a longitudinal rather than block experience in hospice may guarantee the best and most complete experience in hospice for pediatric learners. Program leaders should review and revise curricula frequently.
  - Patient population: Pediatric populations have a span of prenatal to young adulthood. Programs should look to prenatal palliative care as an area to help learners build skills and practice. Programs should look at the distribution of mortality and disease burden in children to be sure that they are covering all pertinent populations. Opportunities for end-of-life care are less common in pediatric populations, so programs may need to find ways to prioritize those experiences over other, more common experiences in pediatric palliative care training.
  
- **ABIM Geriatrics and Palliative Medicine Pilot Program**

A growing number of institutions offer 2-year combined geriatrics and HPM fellowships as part of an ABIM pilot project in competency-based medical education. Taking advantage of the overlap between geriatrics and HPM, the combined programs offer 16 months of clinical rotations to meet the ACGME requirements for both geriatrics and HPM fellowships and 8 months for professional development and leadership training. During the professional development months, fellows

complete a mentored project in research, medical education, quality improvement, or program development. Because the combined fellowship is part of the ABIM pilot, institutions must apply for approval from the ABIM. Visit [ABIM Geriatrics and Palliative Medicine Pilot Program](#) for more information.

## Educational Resources

One of the most rewarding — and daunting — aspects of building or strengthening an HPM fellowship program is developing the educational content: creating curricula, implementing evaluation processes, and fostering faculty development. Fortunately, there are abundant resources available to aid HPM fellowship directors in these tasks.

- **AAHPM Resources Related to ACGME Requirements**

AAHPM has been working since 2009 to develop educational materials for HPM fellowship directors. These materials include the HPM core competencies, Curricular Milestones (CMs), Entrustable Professional Activities (EPAs), and Reporting Milestones (RMs).

- **HPM Core Competencies**

The [Hospice and Palliative Medicine Competencies Project](#) Workgroup created a comprehensive catalog of competencies every HPM specialist should master. These competencies should be used to define learning goals when building fellowship curricula. In addition, the workgroup created a list of measurable outcomes, with assessment methods described for each HPM competency and sub-competency. Lastly, the workgroup created an assessment toolkit that included specific resources to assess fellows' abilities relative to the HPM competencies and measurable outcomes.

- **HPM Curricular Milestones, Entrustable Professional Activities, and Reporting Milestones**

In the late 2000's, the ACGME created the Next Accreditation System (NAS), which shifted the emphasis of training towards competency-based education. In response, AAHPM created workgroups to define HPM-specific CMs, EPAs, and RMs. Like the HPM Core Competencies, these can be used in various ways to inform curricula, help with trainee assessment, and design faculty development.

- [ACGME: The Milestones Guidebook](#) provides detailed information on the history and rationale of competency-based medicine education and the Milestones, as well as practical solutions on implementing and using milestones effectively, the importance of feedback, and early lessons learned.
- [HPM Curricular Milestones](#) provide detailed teaching elements of fellowship training programs. Although not required by ACGME, curricular milestones are offered as a means to provide curricular structure and guidance to educators.



- [HPM Entrustable Professional Activities](#) lists a set of essential activities all HPM physicians should be able to perform. EPAs reflect a “job description” for HPM physicians.
- [Hospice and Palliative Medicine Reporting Milestones](#) (effective July 1, 2019) provide a reporting structure for fellowship programs to describe the progress of individual fellows to the ACGME.
- [Supplemental Guide: Hospice and Palliative Medicine](#) provides additional guidance and examples for the HPM Milestones. As the program develops a shared mental model of the Milestones, consider creating an individualized guide ([Supplemental Guide Template](#) available).
- **Other AAHPM Educational Resources**

AAHPM has developed a wide array of other educational resources, including the following:

  - [PC-FACS](#)

Palliative Care Fast Article Critical Summaries for Clinicians in Palliative Care (*PC-FACS*) is a monthly electronic publication that briefly summarizes key findings of recent, pertinent research studies related to palliative care. This resource can serve as material for fellows’ journal clubs.
  - [Opioid Prescribing](#)

Although aimed at clinicians generally, many of the links to opioid prescribing resource materials could inform fellowship curricula, especially about pain management and balancing the needs of seriously ill patients experiencing pain who also have substance misuse disorder.
  - [Essential Practices of Hospice and Palliative Care Medicine](#)

Updated in 2017, this is a fairly comprehensive series of nine short palliative care topic-focused books with accompanying learning modules. These books could be used by fellowship directors to ensure accurate coverage of (and assessment of trainee knowledge in) particular topic areas, especially for topics that may be less easily accessed in certain settings (pediatrics content, for example).
  - [Primer of Palliative Care, 7<sup>th</sup> Edition](#)

This is an introductory guide to the core topics in palliative care, designed to be helpful to all palliative care clinicians although especially appropriate for trainees.
  - [HPM PASS](#)

The Hospice and Palliative Medicine Physician Assessment and Self-Study Tool (HPM PASS) is a series of 150 Boards-type questions with explanations of the correct answers. This tool could be used by fellowship directors to aid in fellows’ attainment of knowledge, as a fund of knowledge assessment tool, or for Boards preparation.

- [HPM FAST](#)  
The Hospice and Palliative Medicine Focused Assessment and Study Tool (HPM FAST) is also designed to prepare physicians for the HPM board certification exam or to assess knowledge in key topic areas. Each of four HPM FAST modules includes 25 multiple-choice test questions.
- [Intensive Board Review Course](#)  
With topics taught by experts in the field, this HPM board preparation content is available both as a live course and as an audio recording.
- [Hospice Products](#)  
AAHPM has developed an array of educational offerings to improve knowledge of hospice medicine and regulations. Resources include the Hospice Medical Director (HMD) Update and Exam Prep, the HMD Manual, the HPM FAST Hospice Regulatory Module, and the HMD Course recordings.
- **Other HPM Educational Resources**  
In addition to the tools developed by AAHPM, there are other educational resources that can be helpful to HPM fellowship directors.
  - [PC-NOW Fast Facts](#)  
The Palliative Care Network of Wisconsin (PC-NOW) has published more than 350 Fast Facts: brief summaries of palliative care topics accompanied by pertinent references. Available as an app that can be accessed anywhere, this is a helpful resource at the bedside to look up particular topics, or to use for HPM Board exam preparation.
  - [MedEd Portal](#)  
MedEd Portal is an online repository for educational products, including some related to palliative care.
  - [CAPC](#)  
The Center to Advance Palliative Care (CAPC) is an organization that aims to increase access to palliative care for seriously ill patients and their families. It has a wealth of educational resources of various kinds, many focused on clinical program development, but it does require membership.
  - [VitalTalk](#)  
VitalTalk is a program of online and in-person tools to teach communication skills to use with seriously ill patients and their families. The site offers some free online resources.
  - Academic Institution Websites  
Some academic institutions have put descriptions of HPM curricula or other educational products online. Examples include the following:

- [palliative.stanford.edu](http://palliative.stanford.edu)
- [pallcare.hms.harvard.edu/training/curriculum](http://pallcare.hms.harvard.edu/training/curriculum).

## Scholarly Activities

- **Quality Improvement (QI)**

HPM fellows are required to complete a QI project. The ACGME defines a QI project as something that improves or attempts to improve patient care. Not every QI project must *directly* study patients or patient outcomes; projects can impact patients indirectly, including projects focusing on medical education and clinician resiliency.

- Planning a QI or Research Project: Because 1 year is a short time to complete a project, it is important to start early and consider feasibility.
  - The project should impact patient care but need not be large scale.
  - Retrospective chart review projects are often meaningful and manageable.
  - Fellows may share a project.
  - Writing a book review or PC-NOW Fast Fact may count as a project.
- Preparation for Initial QI/Research Project Meetings: To maximize efficiency and productivity, consider taking the following steps to prepare for initial project meetings:
  - Create a list of ongoing projects for fellows to review before meeting.
  - Create a list of past fellow projects to enable them to think broadly about the possibilities.
  - Create a list of mentors willing to work with fellows.
  - Create a timeline for progressing through the steps of the project.
- QI Curricular Resources: There is a wealth of free resources available to faculty wanting to develop QI curricula.
  - AAHPM has a webpage devoted exclusively to [Quality Improvement Education and Resources](#).
  - The Institute for Healthcare Improvement (IHI) also has resources for QI.
    - [IHI Introduction to Quality Improvement](#) presents the science of improvement and how it can be applied to health care. These videos and instructions can be used early in fellowship to provide some basics, initiate idea generation, and assess project feasibility.
    - [IHI Essential Toolkit](#) includes tools and templates to launch a successful quality improvement project. Each of the 10 tools can be used with the Model for Improvement, Lean, or Six Sigma, and includes a short description, instructions, an example, and a blank template. The tools and all of IHI online resources are free to fellows, residents, and educators.
  - The American Medical Association (AMA) Steps Forward program provides continuing medical education (CME) credit modules, instructions and practical tips. The [Quality Improvement Module](#) provides information on the plan, do, study and act cycle to test on a

smaller scale the feasibility of a QI project and teach the fundamentals of scale up for a project.

- **Infrastructure for Programs Emphasizing Research**

Programs face similar challenges in having fellows participate in research projects during a 1-year clinical fellowship as having them do a substantive QI project. As a result, many programs keep research requirements small. For programs with an emphasis on research opportunities or a second year focused on research, the following resources are helpful:

- AAHPM's webpage devoted to [resources for research funding and grant opportunities in palliative care](#).
- Access for fellows to specialists such as research methodologists, clinical trialists, and biostatisticians.
- Start-up research training and funding:
  - industry-funded opportunities
  - seed funds from philanthropic or intramural sources
  - Institutional Review Board (IRB) awareness of unique aspects of HPM research.

- **Other Scholarly Activities for Fellows**

Fellows might engage in a variety of other defined, manageable scholarly activities during a fellowship year. Some possibilities include:

- writing a PC-NOW Fast Fact
- submitting an abstract to AAHPM for poster or oral presentation at the Annual Assembly
- writing a palliative care book review (eg, *Journal of Palliative Medicine* books and media section)
- developing palliative care curricula and publishing it on MedEd Portal
- writing a narrative medicine piece for publication
- writing a blog post
- developing a small group or large lecture teaching session.

## ACGME Considerations

- **Annual Review**

- Once a program achieves initial accreditation or successfully transitions to continued accreditation, the program must update their web-based Accreditation Data System (ADS) program description routinely. Significant changes to rotations/sites and faculty should be posted in a timely manner. Every academic year, a program must submit an annual update which is due on August 31 in ADS. As part of the annual update, any citations must be responded to thoughtfully as programs with citations will be automatically reviewed by the appropriate Review Committee each year until all citations are resolved. Programs without

citations could be reviewed by their Review Committee if ACGME software detects a potential red flag within the annual update data in one of eight areas:

- program demographics (structure and resources)
  - program changes/attrition (program director, core faculty, fellows)
  - scholarly activity (faculty and fellows)
  - board pass rate
  - clinical experience
  - fellow survey
  - faculty survey
  - any site visit information.
- Common omissions in the annual update include:
    - faculty credentials (degree, certification info, license info)
    - participating sites
    - complete scholarly activity
    - updated response to citation(s)
    - complete block diagram.
  - Programs should also pay attention to the “major changes” section of the annual update. This is an opportunity for programs explain why they have made a significant change to a clinical site or their faculty. In addition, it is an opportunity to explain known or potential deficits in the one of areas noted above with an emphasis on how the program is addressing the issue(s).
  - The ACGME offers several [handouts and videos regarding “Avoiding Common Errors in the ADS Annual Update.”](#)
- **Preparing for a Site Visit**
    - After initial accreditation, programs will have a site visit after one or two years. The ACGME will provide at least 60 days advance notice. It is important to update the program’s application by the deadline provided by ACGME. If an error or omission is noticed after submission, the program may provide that information to the site visitor at the beginning of the visit and it will be included in their report to the Review Committee. It is important to have all information readily available to the site visitor, which may mean printing documents that are generally stored electronically. Documents to have ready for a site visit will be made clear by ACGME, but may include:

*Sponsoring and Participating Institution*

- \_\_\_ 1. Current, signed program letters of agreement (PLAs)



### *Resident Appointment and Evaluations*

- \_\_\_ 2. Files of current residents/fellows and recent program graduates
- \_\_\_ 3. If applicable, files of residents/fellows who have transferred into the program (including documentation of previous experiences and competency-based evaluations)
- \_\_\_ 4. If applicable, files of residents/fellows who have transferred to another program
- \_\_\_ 5. Evaluations of residents/fellows at the completion of each rotation/assignment
- \_\_\_ 6. Evaluations showing use of multiple evaluators (faculty, peers, patients, self, and other professionals/staff)
- \_\_\_ 7. Documentation of residents'/fellows' semiannual evaluations of performance with feedback
- \_\_\_ 8. Final (summative) evaluation of residents/fellows, documenting performance during the final period of education and verifying that the resident/fellow has demonstrated competence to enter practice
- \_\_\_ 9. Completed annual written confidential evaluations of faculty by residents/fellows

### *Educational Program*

- \_\_\_ 10. Overall educational goals for the program
- \_\_\_ 11. A sample of competency-based goals and objectives for one assignment at each educational level.
- \_\_\_ 12. Didactic and conference schedule for each year of training

### *Program Evaluation*

- \_\_\_ 13. Written description of the program's Clinical Competency Committee (CCC) (membership, semi-annual resident evaluation process, reporting of Milestones evaluation to ACGME, CCC advising on resident progress including promotion, remediation, and dismissal)
- \_\_\_ 14. Written description of the program's Program Evaluation Committee (PEC) (membership, evaluation and tracking protocols, development of written Annual Program Evaluations, and improvement action plans resulting from the Annual Program Evaluation)

### *Duty Hours and the Learning Environment*

- \_\_\_ 15. Policy for supervision of residents/fellows (addressing progressive responsibilities for patient care, and faculty responsibility for supervision) including protocols defining common circumstances requiring faculty involvement
- \_\_\_ 16. Program policies and procedures for residents'/fellows' duty hours and work environment including moonlighting policy
- \_\_\_ 17. Sample documents for episodes when residents/fellows remain on duty beyond scheduled hours
- \_\_\_ 18. Resident duty hour compliance data (exception reports)



### *Quality Improvement*

- \_\_\_ 19. Sample documents offering evidence of resident/fellow participation in quality and safety improvement projects
- If your program has achieved continued accreditation, an annual review may cause the Review Committee to request a site visit. Programs in continued accreditation should not need to prepare documents and are therefore provided a shorter announcement period. Generally, a program can expect 30 days of notice for an announced site visit.
  - Visit [ACGME Site Visit](#) for an overview of site visits.
  - [ACGME Site Visit FAQs](#) outlines important details to prepare for a site visit.
  - **Self-Study Visit**
    - All programs undergo a full accreditation site visit every 10 years. This is preceded by a comprehensive Self-Study process that includes a description of how the program creates an effective learning environment, and how this leads to desired educational outcomes. A SWOT analysis and plans for improvement are part of this process. The Self-Study occurs in conjunction with the fellowship's core program (internal medicine, family medicine, or pediatrics). [Read more about the Self-Study process.](#)
  - **CLER Visit**
    - Each sponsoring institution must undergo a Clinical Learning Environment Review (CLER) site visit every 24 months to maintain institutional accreditation. Your DIO will let you know how you might be able to help with this visit. At a minimum, the site visitors generally want to meet as a group with program directors to assess strengths and potential areas for improvement around GME training. CLER visits generally focus on quality and safety issues.
    - Visit [ACGME Clinical Learning Environment Review \(CLER\)](#) for more information.
  - [ACGME Glossary of terms](#)



# Appendix One

CHECKLIST FOR:

DATE:

## CHECKLIST AFTER ACCEPTANCE

ITEM	RESPONSIBLE PARTY	DATE	COMMENTS
Phone call from Program Director to fellow	Program Director	January/ February	
Offer letter sent to fellow <ul style="list-style-type: none"> <li>Practicing physicians-tail coverage, state medical license and DEA</li> <li>Verify salary and start date</li> <li>Letter of Agreement</li> </ul>	Program Director/ Coordinator	End of February	
Advise GME office of fellow's decision	Coordinator	End of February	
Forward fellow contact information to physician recruiter for future correspondence and sending Hospital employment	Coordinator	End of February	
Notify Physician Recruiter when LOA/offer letter is signed and returned. <ul style="list-style-type: none"> <li>Copy and send original to physician recruiter</li> </ul>	Coordinator	Early March	
Follow-up with fellow regarding licensing i.e. malpractice, license and DEA	Coordinator	Early March	
Contract initiated and mailed out to fellow	Coordinator	Late March	
Physician recruiter to notify fellowship coordinator and send copy of signed contract when received	Physician Recruiter	Early April	
Verify incoming fellow has license/DEA application, hospital privileges and malpractice insurance coverage. <ul style="list-style-type: none"> <li>Insurance Coverage-Hospital HR</li> <li>Hospital Privileges-Medical staff office</li> </ul>			
Verify start date	Coordinator	Early May	
Schedule physical and drug test	Physician Recruiter	Early June	
Hospital Orientation <ul style="list-style-type: none"> <li>Computer Software –EMR, e-mail, etc.</li> <li>ID Badge</li> <li>Parking Pass</li> <li>Corporate Orientation</li> <li>Campus/Hospital Tour</li> </ul>	Hospital Orientation	July	
Hospice Orientation <ul style="list-style-type: none"> <li>Computer Software-EMR, Email</li> <li>ID Badge/Key Card</li> <li>Laptop</li> <li>Cell phone</li> </ul>	Hospice Orientation	July	
Resident Poster Pictures	Coordinator		
Phone Directory	GME office – E-Form		
Schedule of Rotations	Coordinator		
Fellowship Reference Manual/Rotation Binder	Coordinator		

## References

- <sup>1</sup> Institute of Medicine. *Dying in America: Improving Quality and Honoring Individual Preferences Near the End of Life*. Washington, DC: The National Academies Press; 2015. <https://doi.org/10.17226/18748>.
- <sup>2</sup> Casarett D, Pickard A, Bailey FA, et al. Do palliative care consultations improve patient outcomes? *J Am Geriatr Soc*. 2008;56:593-599.
- <sup>3</sup> Higginson IJ, Finlay IG, Goodwin DM, et al. Is there evidence that palliative care teams alter end-of-life experiences of patients and their caregivers? *J Pain Symptom Manage*. 2003;25:150-168.
- <sup>4</sup> Manfredi PL, Morrison RS, Morris J, Goldhirsch SL, Carter JM, Meier DE. Palliative care consultations: how do they impact the care of hospitalized patients? *J Pain Symptom Manage*. 2000;20:166-173.
- <sup>5</sup> Osenga K, Postier A, Dreyfus J, Foster L, Teeple W, Friedrichsdorf S. A comparison of circumstances at the end of life in a hospital setting for children with palliative care involvement versus those without. *J Pain Symptom Manage*. 2016 Nov;52(5):673-680.
- <sup>6</sup> Keele L, Keenan HT, Sheetz J, Bratton SL. Differences in characteristics of dying children who receive and do not receive palliative care. *Pediatrics*. 2013;132:172-178.
- <sup>7</sup> Smith TJ, Coyne P, Cassel B, Penberthy L, Hopson A, Hager MA. A high-volume specialist palliative care unit and team may reduce in-hospital end-of-life care costs. *J Palliat Med*. 2003;6:699-705.
- <sup>8</sup> Back AL, Li Y-F, Sales AE. Impact of palliative care case management on resource use by patients dying of cancer at a veterans affairs medical center. *J Palliat Med*. 2005;8:26-35.
- <sup>9</sup> Elsayem A, Swint K, Fisch MJ, et al. Palliative care inpatient service in a comprehensive cancer center: clinical and financial outcomes. *J Clin Oncol*. 2004;22:2008-2014.
- <sup>10</sup> Penrod JD, Deb P, Luhrs C, et al. Cost and utilization outcomes of patients receiving hospital-based palliative care consultation. *J Palliat Med*. 2006;9:855-860.
- <sup>11</sup> Morrison RS, Penrod JD, Cassel JB, et al.; Palliative Care Leadership Centers' Outcomes Group. Cost savings associated with US hospital palliative care consultation programs. *Arch Intern Med*. 2008;168:1783-1790.
- <sup>12</sup> Scibetta C, Kerr K, Mcguire J, Rabow MW. The costs of waiting: implications of the timing of palliative care consultation among a cohort of decedents at a comprehensive cancer center. *J Palliat Med*. 2016 Jan;19(1):69-75.
- <sup>13</sup> May P, Garrido MM, Cassel JB, et al. Prospective cohort study of hospital palliative care teams for inpatients with advanced cancer: earlier consultation is associated with larger cost-saving effect. *J Clin Oncol*. 2015 Sep 1;33(25):2745-2752.
- <sup>14</sup> May P, Normand C, Cassel JB, et al. Economics of palliative care for hospitalized adults with serious illness: a meta-analysis. *JAMA Intern Med*. 2018 Jun 1;178(6):820-829.

- <sup>15</sup> Rabow M, Kvale E, Barbour L, et al. Moving upstream: a review of the evidence of the impact of outpatient palliative care. *J Palliat Med*. 2013 Dec;16(12):1540-1549. <https://doi.org/10.1089/jpm.2013.0153>
- <sup>16</sup> Taylor DH Jr, Ostermann J, Van Houtven CH, Tulsy JA, Steinhauser K. What length of hospice use maximizes reduction in medical expenditures near death in the US Medicare program? *Soc Sci Med*. 2007 Oct;65:1466-1478.
- <sup>17</sup> Gozalo P, Miller SC, Intrator O, Roy J, Barber J, Mor V. Hospice effect on government expenditures among nursing home residents. *Health Serv Res*. 2008 Feb;43(1 Pt 1):134-153.
- <sup>18</sup> Lupu D, Deneszczuk C, Leystra T, McKinnon R, Seng V. Few US public health schools offer courses on palliative and end-of-life care policy. *J Palliat Med*. 2013 Dec 1;16(12):1582-1587.
- <sup>19</sup> Sullivan AM, Lakoma MD, Block SD. The status of medical education in end-of-life care: a national report. *J Gen Intern Med*. 2003 Sep;18(9):685-695.
- <sup>20</sup> Sullivan AM, Warren A, Liaw KR, Hwang D, Lakoma M, Block SD. End-of-life care in the curriculum: a national study of associate deans for medical education. *Acad Med*. 2004 Aug;79(8):760-768.
- <sup>21</sup> Darer JD, Hwang W, Hoangmai H, Bass EB, Anderson G. More training needed in chronic care: a survey of US physicians. *Acad Med*. 2004 Jun;79(6):541-548.
- <sup>22</sup> Institute of Medicine. *Approaching Death: Improving Care at the End of Life*. Washington, DC: The National Academies Press; 1997. <https://doi.org/10.17226/5801>.
- <sup>23</sup> NIH State-of-the-Science Conference Statement on Improving End-of-Life Care. Washington, DC: National Institutes of Health. <http://consensus.nih.gov/2004/2004EndOfLifeCareSOS024html.htm>. Accessed November 23, 2009
- <sup>24</sup> Institute of Medicine and National Research Council. *Describing Death in America: What We Need to Know: Executive Summary*. Washington, DC: The National Academies Press; 2003. <https://doi.org/10.17226/10619>.
- <sup>25</sup> National Quality Forum. Priorities: Palliative and End-of-Life Care. [http://www.qualityforum.org/topics/palliative\\_care\\_and\\_end-of-life\\_care.aspx](http://www.qualityforum.org/topics/palliative_care_and_end-of-life_care.aspx). Accessed December 26, 2018.
- <sup>26</sup> Association of American Medical Colleges. Holistic Admissions. <https://www.aamc.org/initiatives/holisticreview/about/>. Accessed November 14, 2018.