Special Article

AAHPM Position Paper: Requirements for the Successful Development of Academic Palliative Care Programs

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Key Words
Palliative care, supportive care, psychosocial, palliative medicine, interdisciplinary care, academic palliative care

Overview

In this position paper, we outline the essential features for an academic palliative care program. Our goal was to assist both academic palliative care faculty and their stakeholders (department chairmen, deans, and others) in building sustainable high-quality academic palliative care programs. We also provide the background that justifies such an effort.

Palliative medicine provides coordinated, interdisciplinary care for a growing population of patients and their families with complex care needs as they face a life-threatening or serious condition. These programs have recently matured in the United States and have become widely implemented features of most academic medical centers (AMCs). Palliative medicine programs deliver sophisticated clinical interventions based on a well-defined and unique body of knowledge and have important educational and research mandates. Recently, the American Board of Medical Specialties has recognized the specialty, and fellowship training has been accredited through the Accreditation Council for Graduate Medical Education in association with 10 medical specialty boards (Internal Medicine, Anesthesiology, Family Medicine, Physical Medicine and Rehabilitation, Psychiatry and Neurology, Surgery, Pediatrics, Emergency Medicine, Radiology, and Obstetrics and Gynecology).

As an emerging discipline, palliative medicine will require structured investments to successfully meet its clinical, educational, and research goals and address its administrative needs. Palliative medicine programs should be supported within academic centers, and provided with comparable resources as established subspecialties, while also being nurtured in order for this developing field to reach its full potential. Moreover, because palliative medicine is an interdisciplinary service that is integrated across multiple settings of care, programs will require novel organizational structures and unique

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benchmarking for such matters as staffing, productivity, compensation incentives, and administrative support.

Existing national guidelines for palliative care programs are primarily concerned with the clinical aspects of palliative care programs. This position paper extends those guidelines to the key infrastructure elements needed to accomplish the clinical, research, and educational missions of academic programs.

Methods

The paper summarizes the recommendations by the Academic Palliative Medicine Task Force and the Program Chiefs Special Interest Group of the American Academy of Hospice and Palliative Medicine (AAHPM).

To develop these recommendations, leaders in the development of academic palliative care programs in the United States were asked to recommend features that are important in the success of academic palliative care programs. A modified Delphi panel approach was used to prioritize and modify the recommendations. Several members of the AAHPM Academic Palliative Medicine Task Force and the Program Chiefs Special Interest Group then drafted this paper. Senior AAHPM members were asked to review and comment on the recommendations. The AAHPM Board then reviewed and endorsed the recommendations and this article.

The Rationale for a Robust Academic Palliative Care Program in Every Academic Medical Center

With a mission and responsibility to be leaders in health care, AMCs can no longer afford to look at palliative care as an optional, “nice to have” program. A robust academic palliative care program is increasingly a key component for achieving success in the clinical, educational, and research missions of the AMC.

As effective treatments for many illnesses continue to emerge and life expectancy increases dramatically, we are confronted with great numbers of people with chronic, debilitating, and life-limiting illnesses. In pediatrics, an increasing number of chronically ill children survive into adulthood. With multiple chronic conditions, patients often experience high illness burden, confusing clinical regimens, fragmentation of care, and financial hardship associated with medical expenses. Palliative care uses a whole-person interdisciplinary approach to address symptom burden, complex illness, and the accompanying social, psychological, spiritual, and economic impact.

The Financial Need

Palliative care, as delivered through an inpatient consultation service or a dedicated inpatient unit, has been shown to improve both the quality of care and the cost-effectiveness of care. In a recently published study of eight U.S. hospitals serving low-, medium-, and high-cost markets, seriously ill patients receiving hospital palliative care consultation, as compared with matched patients who received usual care, had an adjusted net per-admission savings of $1,696 for patients discharged alive and $4,908 for patients who died. A recent study from Duke University demonstrated cost savings to be on average of $2,300 per Medicare beneficiary admitted to hospice care. Other studies demonstrate a dramatic decrease in hospitalizations for nursing home patients admitted to hospice, as compared with usual care. Pediatric palliative care reduces total medical costs by 15%. Any AMC seeking to reduce the cost of care delivery cannot afford to overlook palliative care as an effective intervention.

The Educational Need

The training of future generations of frontline health care providers is entrusted to the faculty of the nation’s medical and nursing schools. Many deficiencies in the quality of care experienced by the seriously ill in this country (high symptom burden, poor doctor-patient communication, widespread fragmentation, and inefficiency) can be
related to a severe lack of medical and nursing education in palliative care.

National surveys of medical students, residents, faculty, and deans demonstrate widespread deficiencies and discomfort with basic palliative care competencies and little exposure to palliative care educational experiences. In a recent 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. When the American Society of Clinical Oncology surveyed its members a decade ago, 90% of the 3,227 medical, surgical, radiation, and pediatric oncologists who responded stated that they learned about palliative care through trial and error, and 38% said that a significant source of their education stemmed from a traumatic experience with a patient. Eighty-one percent of the respondents said that they had inadequate mentoring or coaching in discussing poor prognosis; 65% said that they received inadequate education about controlling symptoms; only 33% reported hearing lectures about palliative care issues during oncology fellowship training; and only 10% reported completing a rotation on a palliative care service or hospice. Similar responses were obtained from pediatric oncologists. A 2007 study of oncology fellows demonstrated major gaps in their educational experiences in palliative care and striking gaps in competency and confidence. Similar results were noted in a study of pediatric training programs.

Steps to improve palliative care medical education have been implemented, but continued progress is needed. The Liaison Committee on Medical Education requirements for undergraduate medical education in palliative medicine remain disappointingly shallow. Similarly, the Accreditation Council for Graduate Medical Education (ACGME) palliative care educational requirements for non-palliative medicine residencies and fellowships are vague and relatively minimal and do not extend to all the fields that play major roles in care for patients near the end of life (e.g., cardiology).

Lastly, improvements in education cannot occur without the faculty to teach and mentor learners around these competencies. There are serious gaps in the availability and expertise of faculty to perform these critical educational tasks, in spite of the existence of well-developed models for palliative care faculty development.

The Research Need

Several reports from the National Institutes of Health and the Institute of Medicine 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. With the growing epidemic of chronic advanced illness, the need to evaluate efficient patient-centered care delivery systems has grown even more critical. Comparative effectiveness research (CER) that addresses research questions in palliative care will help to align CER with critical areas identified by the National Quality Forum (NQF) Priority Partners as fruitful areas to achieve systemic improvement in health care. The new Framework for CER identifies palliative care as an under-researched area. With the massive investment in CER, research teams with palliative care expertise are needed to conceptualize and carry out incisive research into how to best organize and deliver palliative care.

Current National Guidelines for Palliative Care Programs

Graduate Medical Education and Competencies

Requirements for fellowship programs in Hospice and Palliative Medicine (HPM) are specified by the ACGME. Osteopathic requirements are still being drafted. The ACGME requirements elaborate on the competencies expected of graduating fellows, as developed by educators within HPM. Description of core competencies and measurable outcomes are available.

Clinical Care

Two sets of guidelines have informed clinical palliative care programs: the Clinical Practice Guidelines for Quality Palliative Care and the...
The Clinical Practice Guidelines for Quality Palliative Care, first issued in 2004 and revised in 2009 by the National Consensus Project for Quality Palliative Care (NCP), outline eight domains for core precepts and structures of clinical palliative care programs. These domains are as follows:

- Structure and Processes of Care
- Physical Aspects of Care
- Psychological and Psychiatric Aspects of Care
- Social Aspects of Care
- Spiritual, Religious and Existential Aspects of Care
- Cultural Aspects of Care
- Care of the Imminently Dying Patient
- Ethical and Legal Aspects of Care

The NQF then developed A Framework for Preferred Practices for Palliative and Hospice Care Quality: A Consensus Report. This framework, which was based on the NCP Guidelines and domains, established a set of 38 preferred practices associated with quality palliative care.

In 2008–2009, the Center to Advance Palliative Care (CAPC) published a three-part series of consensus recommendations that provide additional operational details about specific features necessary for program sustainability and growth of clinical hospital-based palliative care programs. The first set of recommendations covers operational features for hospital palliative care programs. Twenty-two recommendations are grouped into 12 domains and include “must-have” and “should-have” features. The second set of recommendation lays out 12 operational metrics for palliative care consultation services, such as tracking time from request to initiation of a consultation or the proportion of patients who died in the hospital and received consultation. The third set of recommendations covers operational metrics for inpatient palliative care units, such as length of hospitalization before unit admission, lengths of stay (LOS) on unit, and LOS outliers. This article further elaborates the particular research and educational needs for an academic palliative care program linked to an AMC.

Challenges in Fostering a New and Evolving Field

The relative newness of this field creates special challenges for both emerging palliative care programs and the academic institutions trying to foster them. In an era of reduced resources in medicine, new programs will not easily gain access to needed resources and support. Likewise, the established norms and rules of AMCs, which have evolved over decades, do not easily bend to accommodate the differing needs of this emerging field. Although palliative medicine emphasizes aspects of care consonant with many trends in the evolution of health care (patient- and family-centered care, teamwork, coordination across settings, and integration of patient values), such a focus can make for an uncomfortable fit with established tracks in academic settings. The impact of the newness of the field and of its evolving scope and role deserves special mention.

Newness

With emerging clinical, educational, and research imperatives, academic palliative care programs are relatively young and require significant initial investments. They need to develop their own policies and procedures, management structures, productivity expectations, staffing patterns, incentive plans, and many of the typical administrative systems that are essential to mature academic units. Recruitment of skilled clinical staff from a small but growing workforce is challenging, and many programs must rely on part-time, partially trained staff, some of whom lack board certification and are trained “on the job.” Establishing a clinical presence and reputation is time consuming. Development efforts will not yet have built a needed endowment.

Evolving Scope and Role

Palliative medicine is changing in many aspects and expanding into new areas of medical care. It is “moving upstream,” meaning that programs are taking care of patients at earlier phases of their illnesses, not just in the terminal phase. Evolving also are relationships with groups such as pain medicine specialists, ethicists, hospitalists, and many other specialties with which palliative medicine may share patients and overlap in roles. All these
program-development activities require staff time and support.

**Key Features Distinguishing Palliative Care Programs**

Palliative medicine programs share common elements with other academic programs and, thus, require similar support structures. At the same time, as described later, these new programs present some distinctly different structures from most academic units, and these differences imply unique support needs.

For health care professionals unfamiliar with palliative medicine programs, the following essential elements, as defined by various nationally recognized organizations and credentialing bodies, deserve mention, because they suggest unique programmatic demands.

1. **Interdisciplinary staffing.** Patient and family care is provided by an interdisciplinary team, including, at a minimum, a physician, nurse or nurse practitioner, social worker, and chaplain. Physicians of different primary specialties (e.g., internal medicine and pediatrics) may be involved. Some programs include specialists in nutrition, pharmacy, speech and language pathology, mental health, physical therapy, child life, and so on.

   Administrative structures must address this diversity of professions and the likelihood of multiple reporting lines. Policies, procedures, continuing education programs, and other functions must be directed to a broad range of health care workers.

   Many of these health care workers’ services are not directly reimbursable but are supported by the hospital bed rate. Required bereavement care is not reimbursed at all. Even reimbursable services by a physician or advanced practice nurse do not adequately cover their salaries. Where reimbursement does exist for a specific service, it is often inadequate because of the cognitive, high-intensity, multiple-contact nature of the care.

2. **Coordinated, comprehensive care** addresses the physical, psychosocial, and spiritual needs of the patient and his or her family. Staff communication skills are highly valued, and good communication often requires long clinical visits, sometimes involving multiple team members. Regular team meetings allow for detailed interdisciplinary review of cases and a coordinated team approach but may take many hours a week. Care coordination often requires creating and fostering formal and informal collaborative partnerships between the academic centers and a variety of community-based agencies to facilitate care across the continuum. Productivity expectations must recognize these features of palliative care practice.

   3. **Patient-centered care** is essential for patients with advanced illness and for their families. Appropriate choices about medical management depend considerably on the patient’s values, goals, and preferences rather than following routine medical practices (e.g., decisions about whether to treat pneumonia, insert a feeding tube, or admit to intensive care). Eliciting and responding to patient’s wishes and expectations, as well as negotiating these decisions with the family and staff, can be very time consuming.

   4. **High intensity of care needs** is another regular feature of palliative care practice. Patients and families are typically referred because of serious difficulties encountered in routine management and because of the complexity of their needs, similar to intensive care practice. Emotional issues are often prominent, and good care, including family meetings and compassionate terminal extubations, often mean long visits by specially trained palliative medicine personnel. Likewise, pain crises and other common emergencies require prompt action by readily available providers. These features of palliative care have clear staffing implications.

   5. **Continuity of care.** Services are provided across the continuum of care, seven days a week, 365 days a year. Typical care settings include the hospital, office, home, hospice, rehabilitation center, and nursing home. Many palliative care programs manage a dedicated inpatient palliative care or hospice unit or a freestanding hospice unit. With multiple transitions of care, extra attention must be paid both to interteam communication and to communication with other health care providers. Such communication facilitates a proactive approach that can prevent unnecessary hospitalization and inappropriate resource utilization.
6. Care of the family. Addressing family needs, including bereavement care, is a formally recognized service obligation in palliative care practice. Family meetings and other family counseling activities may constitute a major portion of clinical service. These functions are typically time-consuming and often not remunerated.

Recommendations for Academic Palliative Care Programs

This section discusses key academic, administrative, clinical, educational, and research features needed for an academic palliative care program to succeed. The recommendations are summarized in Table 1.

Administrative Arrangements

Appropriate administrative arrangements are necessary for ongoing management of such matters as marketing, process improvement, data collection, business and strategic planning, and grants and development, and should allow for palliative care to be well represented in decision making in the hospital and the medical or osteopathic school.

Academic palliative care programs have primarily emerged as an offspring of clinical consultation services or related academic programs in such fields as family medicine, internal medicine, oncology, anesthesiology, and pediatrics. Physicians working in these programs often are appointed through administrative structures in which the overwhelming majority of their colleagues practice in a very different way. Likewise, palliative medicine clinicians regularly report to administrative leaders who have different clinical and academic perspectives and little direct experience with the field.

Such administrative arrangements may have a number of unfortunate consequences for academic palliative care physicians:

1. Clinical care delivery issues, such as productivity expectations, incentive plans, billing, business planning, and required interdisciplinary collaboration with other colleagues from diverse health care disciplines may be dramatically different from those in other fields. The need for very long consultations, frequent family meetings, the interdisciplinary nature of the work, and the significant emotional toll that the work can have on faculty may not be routinely appreciated by colleagues in other specialties or by administrative leaders.

2. Palliative medicine is practiced, taught, and investigated across a spectrum of settings, including general inpatient and intensive care, outpatient clinics, specialized inpatient and community-based units, and at home. Integrating this diverse care continuum may be unfamiliar to many administrative leaders, leading to underestimation of both the tremendous potential and the unique support needs of a comprehensive palliative care continuum of care.

3. The relative newness of palliative care in academic medicine means that palliative care faculty must engage in advocacy for appropriate time in the curriculum or for appropriate space for research. This advocacy requires focused, dedicated administrative leadership that is supported by appropriate administrative staff.

4. Data collection and analysis are vital not only to many palliative care functions, especially when programs are attempting to demonstrate their impact on quality of care, patient/family satisfaction, and resource utilization, but also for daily care management, strategic planning, and quality improvement. Personnel, processes, and strategies need to be in place to collect, analyze, and present such data. For optimal data collection and benchmarking, new approaches to hospital data management and metric development should be considered.

5. Hospital, philanthropic, and grant support are essential for the development and maintenance of academic palliative medicine programs. Addressing philanthropic needs requires recognizing palliative medicine as a priority area and assigning development personnel to pursue funding.

In many circumstances, palliative medicine will best achieve success by being designated and appropriately supported as a department, division, center, or similar unit, thus enjoying parity with other academic sections and being directly represented in major administrative
### Table 1
Key Components of Robust Academic Palliative Care Programs

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<tr>
<th>Academic Domain</th>
<th>Recommendation</th>
<th>Subcomponents of Recommendation</th>
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<tr>
<td>Administration</td>
<td>Administrative support is commensurate with other academic units but addresses the unique challenges and opportunities for an academic palliative care program with clinical, educational, and research goals.</td>
<td>1. A distinct administrative structure has overall responsibility for the program and an ability to develop specific policies and procedures appropriate to the circumstances in which palliative care is delivered, taught, and investigated.</td>
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<td>2. A department, division, or center should be established for more mature programs.</td>
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<td>3. Administrative arrangements should accommodate clinicians from multiple specialties and disciplines and across care settings, and provide clear, coordinated, and efficient management.</td>
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<td>4. Clinical benchmarks and data collection/evaluation systems, including RVU expectations, are designed specifically for palliative care and do not simply replicate systems of other specialties.</td>
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<td>5. Work expectations and schedules should be realistic and compatible with self-care and renewal.</td>
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<td>6. Administrative systems and personnel, including dedicated senior leadership, support the program.</td>
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<td>7. The program has access to assistance for obtaining grants and development funds that can assist in meeting its mission.</td>
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<td>Clinical</td>
<td>A full range of palliative care services is available to all patients and their families in inpatient and outpatient settings and is coordinated with services in hospice, home care, and non-acute care institutions.</td>
<td>1. Clinical aspects of palliative care programs meet NQF preferred practices and the consensus guidelines of the CAPC. (New programs rapidly meet all NQF preferred practices, and all CAPC &quot;must&quot; guidelines. More mature or larger programs meet CAPC &quot;should&quot; guidelines.)</td>
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<td>2. Educational and research activities are integrated into clinical programs.</td>
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<td>3. Academic palliative care programs assume a leadership role in improving quality of palliative care provided by the institution as a whole, independent of the palliative care team’s direct patient care.</td>
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<tr>
<td>Education</td>
<td>Palliative care education is supported and integrated into all levels of training.</td>
<td>1. All levels of trainees (medical students, residents, and fellows in nonpalliative medicine fellowships) have an appropriate palliative care curriculum, clinical experiences, and opportunities to learn from palliative care faculty.</td>
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<td>2. Faculty time is supported for curriculum and program development and for teaching</td>
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<td>4. Programs evaluate the impact of their educational curriculum on quality indicators and other outcomes.</td>
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<td>Research</td>
<td>Palliative care research programs are provided with resources similar to those of other subspecialty units, and may require extra resources for start-up.</td>
<td>1. A palliative care research agenda is established in coordination with the strategic research agenda for the academic medical center.</td>
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<td>2. Palliative medicine researchers should have resources, including protected time, similar to what is available to other clinical subspecialists in the medical center.</td>
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<td>3. Philanthropic seed money is required to jump-start and sustain development of research programs that do not yet have access to government and industry grants.</td>
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<td>4. Junior investigators require assistance and support in developing strong research mentorship relationships, either locally or at a distance.</td>
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<td>5. The IRB should be familiar with and capable of supporting palliative care research, and consider inclusion of a palliative care clinician.</td>
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decisions. In other situations, however, palliative medicine programs exist as subunits in fields such as oncology, geriatrics, or general internal medicine, and may benefit from the support of the sponsoring academic department. In either situation, administrative arrangements for palliative medicine need to accommodate clinicians from multiple medical specialties and other health care disciplines.

**Recommendation 1.** Administrative reporting, access to resources, clinical benchmarks, work-load, and scheduling need to be set specifically for palliative care, with policies conducive to the specific circumstances in which palliative care is delivered, taught, and researched.

1. An appropriate administrative unit able to house clinicians from multiple specialties should be designated. A department, division, or center should be established for mature programs.

2. Administrative arrangements should accommodate clinicians from multiple specialties and disciplines and across settings. Specifically, reporting structures must be clear to minimize confusion and maximize efficiency.

3. Clinical benchmarks and data collection/evaluation should be designed specifically for palliative care and not simply replicate the benchmarks of other specialties. Relative Value Unit (RVU) expectations should be appropriate to palliative medicine. Personnel to support data collection and benchmarking are a necessary and an integral component to this activity.

4. Work expectations and schedules should be realistic and compatible with self-care and renewal.

5. Resources are required for administrative data collection.

6. Palliative care should have access to administrative support for obtaining the grants and development funds that assist in program development.

**Clinical Programs**

The role of palliative medicine in AMCs is similar to that of other medical subspecialties, and the arrangements for palliative care
clinical programs should follow such formats. At the same time, palliative medicine within AMCs requires unique resources.

Palliative care services are based on the 24-hour, seven-day-a-week availability of specialists and, therefore, clinical needs cannot be appropriately met unless the number of trained clinicians allows for such coverage. Many consultations are urgent or emergent in nature and must be completed in a timely manner. Palliative medicine specialists require rapid access to disciplines, such as social services, pastoral care, rehabilitation, nutrition, counseling, and advanced practice nursing. In addition, clinical programs must allow for essential care functions, such as interdisciplinary team meetings and coordination of clinical services. Teamwork and coordination of care are accomplished through dedicated meeting time. Understaffing will necessarily stifle the growth and delivery of high-quality care. RVUs, as currently configured, poorly reflect the effort of palliative care clinicians, requiring either adjustments in productivity expectations or alternate metrics. In addition, the coordinated function of the team as a whole needs to be recognized as a key ingredient in the quality and quantity of delivered care.

Outpatient centers and designated palliative care units, offering sophisticated models for the delivery of palliative care under the direct supervision of palliative care specialists, are also essential features for a fully developed palliative care program. Coordinated with other specialists’ schedules, outpatient centers may provide ready access to palliative medicine specialists and interdisciplinary teams during one trip to the outpatient site. Just-in-time consultation and interdisciplinary team arrangements are of great importance to patient care because of the significant symptom burden and limited ability of many patients to be transported to the hospital.

Palliative care units are specialized in-hospital settings for the assessment and management of patients with significant symptom burdens. These settings ensure appropriate and efficient medical management of the most complex cases, while supporting education and research. The rationale of palliative care units is similar to that of other intensive care units, including specific design requirements; specially trained staff; opportunities for sophisticated training and staff support; and a concentration of patients that facilitates resource conservation, education, and research.

**Recommendation 2.** The clinical care of palliative medicine patients should meet or exceed NQF preferred practices and CAPC consensus guidelines:

1. New programs should move rapidly to meet all NQF preferred practices and all CAPC “must” guidelines.
2. Mature programs should meet CAPC “should” guidelines.
3. Educational and research activities should be integrated into clinical programs.
4. Academic palliative care programs should take a leadership role in improving the quality of palliative care provided by the institution as a whole, independent of the palliative care team’s direct patient care.

**Education**

Palliative medicine programs in AMCs play a major role in educating physician colleagues and other health care providers, as well as in postgraduate and undergraduate medical education. Many patients facing life-threatening illness will not need palliative care consultation, whereas others will benefit from consultation but will not be followed regularly by the palliative care team. The education and support of clinical colleagues allows for state-of-the-art care for the large number of patients who may not require specialist intervention: those with lesser symptom distress and/or less urgent end-of-life issues. As a priority for the field and for the entire health care field, academic programs have a crucial need to train junior and mid-career faculty as specialists and to provide generalist training for all clinically active physicians.

Many essential topics of medical education are, in fact, key domains of palliative medicine and are under-represented in both undergraduate and graduate training. Topics include pain and symptom control, psychosocial and spiritual support for the dying patient and his or her family, assistance with end-of-life decisions and advance care planning, continuity of care across settings, home and hospice care, bereavement, ethics, professionalism, and interdisciplinary teamwork.
AMCs should include palliative care education in the curriculum for undergraduate education, postgraduate education of residents and fellows, and continuing medical education. Although fellowship program guidelines provide some guidance about appropriate staffing for fellowship training, these programs are often not well supported, either in terms of administrative salaries and support or providing stipends for faculty. Where available, support from General Medical Education funds and other sources should be provided. Successful basic education is generally achieved through mandatory courses or rotations. With the current emphasis on ambulatory care training for internal medicine residents, palliative medicine programs may have busy outpatient practices that can be a rich environment for learning.

Medical education is only possible when a minimum cohort of physicians is available and when they have appropriately protected time. To start a fellowship program, at least two physicians certified in HPM are required. Finally, as with other subspecialty practices, ongoing education for specialists is also essential in the form of grand rounds, case conferences, quality improvement discussions, retreats, journal clubs, and similar educational formats.

**Recommendation 3.** Palliative care content should be integrated into curricula at all levels of education, with financial support for faculty time necessary for curriculum and program development as well as for teaching. All levels of learners should have appropriate experience with palliative care. As resources and faculty become available, AMCs should, over time, develop ACGME-accredited fellowships in HPM.

1. All levels of trainees (medical students, residents, and fellows in non-palliative medicine fellowships) should have an appropriate palliative care curriculum, clinical experiences, and opportunity to learn from palliative care faculty.
2. Mature programs should offer an ACGME-accredited fellowship in palliative medicine.
3. Programs should evaluate the impact of their educational curriculum on quality indicators and other outcomes.

**Research**

Palliative medicine programs in academic centers have the potential for a major contribution to clinical research. They can serve as laboratories for practice-based research, whereas palliative care clinical populations provide a venue for symptom control trials, behavioral and social science research, epidemiologic and health services research, and bereavement studies. Palliative care programs should be provided with access to research methodologists, individuals with clinical trial expertise, and biostatisticians. Palliative medicine investigators also should have access to start-up research funding such as is available to other clinical subspecialists in the medical center. Measurement of palliative outcomes also should be incorporated into many clinical trials.

The establishment of a research agenda and of successful research programs in palliative care will require an initial investment and long-term support. The infrastructures for research training and conduct, including industry-funded opportunities, which are available in other fields, have often not been developed and are unlikely to grow rapidly for palliative care. Seed funds obtained from philanthropic or intramural sources will be essential for the establishment of successful palliative care research programs. These seed funds will allow investigators to conduct pilot projects and generate initial studies that will be used in the preparation of major grant applications. Appropriate philanthropic funding should be available for a minimum period of five years to allow for the establishment of a successful independent research program. Institutional review boards (IRBs) are often unfamiliar with studies on patients and families facing the end of life and may require education concerning the unique aspects of clinical research about patients at the end of life.

**Recommendation 4.** Palliative medicine researchers should have protected research time comparable with other subspecialists in the AMC.

1. Establish a palliative care research agenda and coordinate it with the strategic research agenda for the AMC.
2. Provide philanthropic seed money to jump-start and sustain development of
research programs that do not yet have access to government and industry grants.

3. Assist and support junior investigators in developing strong research mentorship relationships, either locally or long distance.

4. The IRB should be familiar with and capable of supporting palliative care research. Ideally, a person with expertise in palliative care research should serve on the IRB.

**Academic Professional Development**

Recognizing that criteria for academic advancement are institution specific and may be difficult to influence, we note that career advancement may be especially challenging for physicians working to establish a new discipline. For instance, research published in newer journals is likely to have a lower impact factor simply because the journal is less well known. Likewise, research dollars are harder to obtain without dedicated funding agendas and streams at the National Institutes of Health. To the extent possible, academic leadership should be alert to opportunities to provide appropriate academic recognition for non-traditional activities that advance development of this new field.

**Recommendation 5.** Develop criteria for academic advancement that recognize the non-traditional academic achievements associated with the establishment of a new medical subspecialty.

1. Provide mentorship for faculty development.
2. Recognize a broad range of scholarly activities that build the foundation of evidence-based practice, including development of clinical practice guidelines, qualitative research, and rigorous research forms in addition to randomized control trials.
3. Recognize the interdisciplinary and collaborative nature of most palliative care clinical research projects.
4. Recognize the complexity and increased resources needed to conduct research in individuals with advanced illness and high illness burden across multiple sites (including the home).

**Summary**

The field of palliative medicine has tremendous potential for contributing to AMCs. AMCs are facing increasing demographic pressures of chronic advanced illness and the upcoming inevitable changes associated with health care reform. Palliative medicine, with its emphasis on patient-centered complex illness care, and on innovative health care delivery models, is positioned to play a key role in assisting the AMC to thrive under these changing conditions. AMCs will need to be knowledgeable about the special attributes of palliative care, including its administrative and organizational needs, in order for palliative medicine, the newest medical subspecialty, to grow and succeed.

**Acknowledgments**

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