



**BOARD OF REGENTS**  
SUMMARY OF ITEM FOR ACTION,  
INFORMATION, OR DISCUSSION

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**TOPIC:** University of Maryland, Baltimore: Master of Science in Palliative Care; Post-baccalaureate Certificates in Principles and Practice of Hospice and Palliative Care; Clinical Aspects of Palliative Care; Psychosocial/Spiritual Aspects of Palliative Care; Leadership and Administration in Palliative Care

**COMMITTEE:** Education Policy and Student Life

**DATE OF COMMITTEE MEETING:** May 10, 2016

**SUMMARY:** As recognized in the proposed amendment to the U.S. Public Health Service Act, there is a need "...to increase the number of permanent faculty in palliative care at accredited allopathic and osteopathic medical schools, nursing schools, social work schools, and other programs, including physician assistant education programs, to promote education and research in palliative care and hospice, and to support the development of faculty careers in academic palliative medicine...Palliative care is interdisciplinary, patient- and family-centered health care for people with serious illnesses. This type of care is focused on providing patients with relief from the symptoms, pain, and stress of a serious illness, whatever the diagnosis. The goal of palliative care is to relieve suffering and improve quality of life for both patients and their families. Palliative care is provided by a team of doctors, nurses, social workers, physician assistants, chaplains, and other specialists who work with a patient's other health care providers to provide an extra layer of support, including assistance with difficult medical decision-making and coordination of care among specialists. Palliative care is appropriate at any age and at any stage in a serious illness, and can be provided together with curative treatment." (H.R. 3119 – 114<sup>th</sup> Congress (2015-2016))

The proposed program is designed to provide interprofessional education and training for professionals who wish to gain experience in caring for patients with advanced and terminal illnesses and their families, emphasizing and integrating the unique contributions made by all disciplines who provide palliative care. Disciplines include physicians, pharmacists, nurses, nurse practitioners, physician assistants, social workers, chaplains and grief and bereavement specialists. Faculty from the Schools of Pharmacy, Medicine, Nursing, Social Work, Law, and Graduate School will work in an interprofessional fashion to provide the curricular content, supporting UMB's mission.

The programs cover the basic principles of hospice and palliative care in four foundation core courses, for which the participant will earn a Post-baccalaureate Certificate titled "Principles and Practice of Hospice and Palliative Care." The four core courses must be completed prior to beginning elective coursework. Learners will then select four electives courses, which may be in an area of focus (Clinical, Administrative, Psychosocial/Spiritual or Thanatology) or select from among all options. Four courses successfully completed in one track will constitute award of a second Post-baccalaureate Certificate. Students will receive this formal award prior to completing the Master of Science degree. All learners will complete two remaining core courses.

As indicated in the attached proposal, "The target learner audience includes healthcare providers who are working in palliative care and wish to advance their knowledge and skills...Conducted exclusively online (e.g., students need not attend in person on any campus), the program utilizes asynchronous lectures (e.g., pre-recorded), assigned readings, web conferences, and online active-learning instruction." If approved, the program would become the second M.S. in Palliative Care offered in U.S., and the only one that is offered completely online.

**ALTERNATIVE(S)**: The Regents may not approve the program or may request further information.

**FISCAL IMPACT**: No additional funding is necessary. The program will be supported through tuition.

**CHANCELLOR'S RECOMMENDATION**: That the Committee on Education Policy and Student Life recommend that the Board of Regents approve the proposal from the University of Maryland, Baltimore to offer the Master of Science in Palliative Care; and Post-baccalaureate Certificates in Principles and Practice of Hospice and Palliative Care; Clinical Aspects of Palliative Care; Psychosocial/Spiritual Aspects of Palliative Care; and Leadership and Administration in Palliative Care.

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COMMITTEE RECOMMENDATION:

DATE: May 10, 2016

BOARD ACTION:

DATE:

SUBMITTED BY: Joann A. Boughman

301-445-1992

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## UNIVERSITY SYSTEM OF MARYLAND INSTITUTION PROPOSAL FOR

### **Master of Science in Palliative Care**

#### **A. Centrality to institutional mission statement and planning priorities:**

Mission of University of Maryland, Baltimore: The University of Maryland, Baltimore (UMB) is the state's public health, law, and human services university devoted to excellence in professional and graduate education, research, patient care, and public service. As a diverse community of outstanding faculty, staff and students, and using state-of-the-art technological support we educate leaders in health care delivery, biomedical science, global health, social work, and the law. We emphasize interdisciplinary education and research in an atmosphere that explicitly values civility, diversity, collaboration, teamwork, and accountability. By conducting internationally recognized research to cure disease and to improve the health, social functioning, and just treatment of the people we serve, we foster economic development in the city, state and nation. We are committed to ensuring that the knowledge we generate provides maximum benefit to society and directly enhances our various communities.

Palliative care is defined by the World Health Organization as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual."<sup>1</sup> Palliative care is "specialized medical [health] care; it is appropriate for patients of any age with any stage and type of serious illness, whether the goal is to cure illness or focus primarily on quality of life."<sup>2</sup> The growth of hospice (a form of palliative care) and palliative care programs in the United States is unprecedented, yet still insufficient. Approximately 1/3 of hospitals have no access to palliative care services, and the situation is even direr in the outpatient environment. This results in acute but predictable patient crises, resulting in avoidable emergency room visits and hospital admissions.

Unsurprisingly, we have a dramatic shortage of skilled hospice and palliative care practitioners. There is an estimated need for almost 20,000 palliative-care trained physicians in hospitals alone, and this doesn't even include the need in nursing homes, hospice, ambulatory care or other practice settings.<sup>2</sup> There is also a dearth of trained hospice and palliative care RNs and APRNs that parallels the physician shortage.<sup>3</sup> Unfortunately we do not currently offer robust undergraduate, graduate or postgraduate interdisciplinary training programs in palliative care in the US at this time to meet this need. Recently, Senator Tammy Baldwin reintroduced the Palliative Care and Hospice Education and Training Act in the US Senate, which calls for expanding opportunities for interdisciplinary education and training in palliative care for physicians, registered nurses, advanced practice nurses, physician assistants, social workers and other health care professionals.<sup>4</sup>

The proposed Master of Science program in Palliative Care addresses this tremendous need for educational opportunities in palliative care both in the US and globally. The purpose of this program is to provide interprofessional education and training for professionals who wish to gain experience in caring for patients with advanced and terminal illnesses and their families, emphasizing and integrating the unique contributions made by all disciplines who provide palliative care. Disciplines include physicians, pharmacists, nurses, nurse practitioners, physician assistants, social workers, chaplains and grief and bereavement specialists.

This 30 credit program will be conducted completely online, with learners working primarily asynchronously, although group work will be a significant component. The target learner audience includes healthcare

providers who are working in palliative care and wish to advance their knowledge and skills. Candidates will minimally have a baccalaureate degree, and most will have an entry-level health care disciplinary degree (e.g., MD, PharmD, RN, APRN, PA-C, LCSW, etc.). Conducted exclusively online (e.g., students need not attend in person on any campus), the program utilizes asynchronous lectures (e.g., pre-recorded), assigned readings, web conferences, and online active-learning instruction.

Just as this program will be taken by multiple disciplines, it will similarly be taught by multiple disciplines, both within and outside the UMB campus. Faculty from the Schools of Pharmacy, Medicine, Nursing, Social Work, Law, and Graduate School will work in an interprofessional fashion, supporting UMB's mission. This program will fill a gap in educating professionals in Baltimore, Maryland, the US and globally, enhancing the quality of life of innumerable individuals who suffer with advanced illnesses.

This proposal for a new program to enroll students in Spring 2017 is endorsed by Dean Eddington, the Department of Pharmacy Practice and Science, the Department of Pharmaceutical Health Sciences Research, and the Department of Pharmaceutical Sciences. The interprofessional education (IPE) emphasis of this program (both within learners and faculty) is consistent with President Perman's vision for IPE and exemplifies the values of the institution.

## **B. Characteristics of the Proposed Program**

### Suggested program description (as it would appear in the Graduate School Catalog)

Graduates will acquire knowledge and skills to collaborate in an interdisciplinary environment to provide expert care to patients with advanced and terminal illnesses, and their families. The University of Maryland MS program in Palliative Care provides learners with experiences designed to foster a deeper knowledge and understanding of the numerous clinical, social, psychosocial, spiritual, ethical and grieving issues in advanced illness. Participants will learn to critically evaluate evidence and apply these findings to best practices in patient care. The target learner audience includes practitioners who are working in hospice and palliative care or aspire to do so, including physicians, advance practice nurses, nurses, pharmacists, physician assistants, social workers, chaplains and grief/bereavement specialists. The programs covers the basic principles of hospice and palliative care in four foundation core courses, for which the participant will earn a Graduate Certificate titled "Principles and Practice of Hospice and Palliative Care." The four core courses must be completed prior to beginning elective coursework. Learners will then select four electives courses, which may be in an area of focus (Clinical, Administrative, Psychosocial/Spiritual or Thanatology) or select from among all options. Four courses successfully completed in one track will constitute award of a second Graduate Certificate. Students will receive this formal award (the graduate certificate) prior to completing the Master of Science degree. All learners will complete two remaining core courses. There is no requirement for students to attend class in person on campus. The program utilizes asynchronous lectures (e.g., pre-recorded), readings, reflections, practice assignments, and active-learning instruction such as interprofessional group work. The MS in Palliative Care is taught entirely online. To be successful, the learner must complete all required and elective coursework totaling 30 credits.

### **B1A. Terminal Performance Objectives - Master of Science in Palliative Care**

#### **After completing this degree, the graduate will be able to:**

1. Apply the knowledge of one's own role and those of other professions to appropriately assess and address the healthcare needs of patients with serious or life-threatening illnesses and their families.\*

2. Assess and develop practices that reflect patient or surrogate's goals, preferences and choices for care within currently accepted standards of medical care, professional standards of practice and applicable state and federal law.
3. Apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan and deliver patient/population-centered care that is safe, timely, efficient, effective, and equitable.\*
4. Collaborate with the interdisciplinary team in a climate of mutual respect and shared values to identify and manage the symptoms of patients at the end of life, and the needs of patients and families.\*
5. Contribute as part of the interdisciplinary team in the assessment and management of pain and/or other physical symptoms that demonstrate evidence-based best practices.
6. Contribute as part of the interdisciplinary team in the assessment and management of psychological and psychiatric aspects of care that demonstrates evidence-based best practices.
7. Complete a comprehensive, person-centered interdisciplinary assessment that identifies the social strengths, needs and goals of each patient and family, and develop a care plan designed to meet these needs, promote achievement of goals, and maximize strengths and well-being.
8. Conduct an interdisciplinary assessment of spiritual, religious and existential aspects of care, and facilitate a plan that reflects rituals or practices as desired by patient and family, including at and after the time of death.
9. Develop practices that reflect consideration of patient, family and community cultural beliefs and linguistic needs.
10. Identify, acknowledge and resolve ethical issues that arise in the care of patients with advanced illnesses.
11. Communicate with patients, families, communities, and other health professionals in a responsive and responsible manner that supports the interdisciplinary team approach to the management of patients with advanced illnesses and their families. \*
12. Demonstrate a commitment to excellence through continuing professional development and lifelong learning, and the education and training of patients, families, caregivers, interdisciplinary team members, other healthcare professionals, and other relevant stakeholders.
13. Describe strategic planning process of HPC program development and management, and data-driven processes that drive programmatic continuing quality improvement.
14. Implement self-care strategies to support coping with suffering, loss, moral distress and compassion fatigue.

\* indicates Interprofessional Collaborative Practice Competency Statement

**B1B. Provide a list of course with title, semester credit hours and course descriptions, along with a description of program requirements.**

The proposed MS in Palliative care is a 30 credit program, taught completely online. The program will meet all terminal performance objectives, and allow for specialization (self-determined learning) within the degree. On admission to the program, all learners will be assigned an academic advisor, and will take four core courses, followed by four elective courses, and conclude with two required courses, as follows.

Course #	Course Name (all 3 cr)	Course Description
<b>Required Core Courses (12 credits) (completing these 12 credits = graduate certificate "Principles and Practice of Hospice and Palliative Care")</b>		
MSPC 601	Principles of Hospice and Palliative Care	An introductory course, participants will learn about the patient/family centric model of palliative care, the interdisciplinary team concept, models of care in hospice and palliative care and regulatory aspects of these practice models. Participants will also learn about education and self-care for practitioners, operational aspects of hospice and palliative care, the application of analytic inquiry and evidence-based discovery, and implications for community outreach.
MSPC 602	Communication and Healthcare Decision Making	A key element of this course is determining patient and family goals, preferences and choices during advanced illness, and developing a plan of care to support these decisions. A significant portion of this course will also be devoted to communication techniques including delivering bad news, counseling techniques and introductory content on ethical decision-making.
MSPC 603	Psychosocial, Cultural and Spiritual Care	Participants in this course will learn how to assess and address psychological, psychiatric, cultural and spiritual aspects of care in advanced illness, including management of grief and bereavement. Implementation of care plan tactics will be addressed as well including targeted communication, interventions and referrals as needed.
MSPC 604	Symptom Management in Advanced Illness	Pain management is the most prevalent symptom in advanced illness. Participants will learn how to perform a uni- and multi-dimensional pain assessment, and the assessment of the most common non-pain symptoms associated with advanced illness. Management strategies including non-pharmacologic and pharmacologic will be examined. A case-based learning model will be used in this course to master content, including demonstration of information literacy and quantitative fluency.
<b>Electives in Clinical Track (completing these 12 credits = graduate certificate "Clinical Aspects of Hospice and Palliative Care")</b>		
MSPC 605	Advanced Pain Management and Opioid Dosing	Participants will learn to perform an advanced assessment of a pain complaint (history, physical exam, diagnostics/imaging as necessary) and demonstrate advanced and in-depth knowledge of the pathogenesis of pain. Participants will also acquire in-depth knowledge of evidence-based non-pharmacologic management of pain, and evidence-based advanced pharmacology (including drug therapy selection, dosing, monitoring, and titration), designed to meet patient-centric therapeutic goals. (Pre-requisite: MSPC 604 – Symptom Management in Advanced Illness).
MSPC 606	Advanced Non-Pain Symptom Management	This course prepares participants to perform advanced assessment of patients with complex non-pain symptoms, developing advanced skills to identify pathogenesis of the complaint, and advanced non-pharmacologic and pharmacologic management of symptoms. Participants will develop advanced skills in managing these symptoms through the interdisciplinary team. (Pre-requisite: MSPC 604 – Symptom Management in Advanced Illness).

<b>Course #</b>	<b>Course Name (all 3 cr)</b>	<b>Course Description</b>
MSPC 607	Advanced Disease State Management	Using a disease-based approach, participants will perform advanced assessment of common advanced illness disease states (e.g., COPD, cancer, neurodegenerative disorders, heart disease, etc.), sophisticated identification of pathogenesis and disease progression, selection of beneficial evidence-based treatments, and skills to discontinue medically futile treatments as disease progresses. (Pre-requisite: MSPC 604 – Symptom Management in Advanced Illness).
MSPC 608	Clinical Management of Special Patient Populations	Participants in this course will develop advanced skills used to manage special populations with advanced illness including pediatrics, geriatrics, palliative care emergencies, advanced assessment and management skills to facilitate withdrawal of life-sustaining treatments, and manage the days before death. (Pre-requisite: MSPC 604 – Symptom Management in Advanced Illness).
<b>Electives in Administration (completing these 12 credits = graduate certificate “Leadership and Administration in Hospice and Palliative Care”)</b>		
MSPC 609	Hospice Leadership and Administration	This course addresses the development of hospice leadership skills including developing a supportive culture, mission and values, promoting team building, quality improvement initiatives, service and performance excellence, assuring appropriate staffing, operational aspects, financial management, human resources management, quality management, organizational integrity and compliance. Participants will be intimately knowledgeable about the standards and regulations for hospice eligibility and compensation models. (Pre-requisite: MSPC 604 - Principles of Hospice and Palliative Care).
MSPC 610	Palliative Care Leadership and Administration	This course addresses the development of palliative care leadership skills including developing a supportive culture, mission and values, promoting team building, quality improvement initiatives, service and performance excellence, assuring appropriate staffing, operational aspects, financial management, human resources management, quality management, organizational integrity and compliance. Participants will be intimately knowledgeable about the standards and regulations for palliative care practice and compensation models. (Pre-requisite: MSPC 604 - Principles of Hospice and Palliative Care).
MSPC 611	Practice Development and Strategic Planning	Participants in this course will learn to assess the need for a hospice and/or palliative care program, and develop, implement and maintain an ongoing data driven process that reflects the complexity of the organization and focuses on clinical, economic and humanistic outcomes. Learners will assure strategic alignment of program operationalization with established organizational mission and vision with consideration for growth. (Pre-requisite: MSPC 604 - Principles of Hospice and Palliative Care).
MSPC 612	Principles and Practice of Palliative Care Education	This course provides participants with a solid grounding in the principles of adult learning, how to assess knowledge and learning differences, principles of instructional design, and barriers to teaching and learning. Participants will be prepared to perform an audience analysis, prepare and deliver learning materials to patients, families, caregivers, other health care providers, and other stakeholders. (Pre-requisite: MSPC 604 - Principles of Hospice and Palliative Care).

**Electives in Psychosocial/Spiritual Track (completing these 12 credits = graduate certificate “Psychosocial/Spiritual Aspects of Hospice and Palliative Care”)**

MSPC 613	Advanced Decision-Making and Communication Skills	This course provides participants with advanced skills and information necessary to elicit patient and/or family values and delineate goals of care regarding pain and symptom management, advanced life-sustaining therapies, and advanced communication techniques for delivering bad news, establishing goals of care, suspending therapies, and death notification. (Pre-requisite: MSPC 602 - Communication and Healthcare Decision Making)
MSPC 614	Advanced Spirituality and Psychosocial Skills	Participants will develop advanced skills in the assessing patients and families to determine psychosocial needs, spiritual and cultural concerns, and address patient and family suffering, coping and healing within the emotional, psychological and social domains with focused developmentally appropriate assessment followed by targeted communication, interventions and referrals. (Pre-requisite: MSPC 603 - Psychosocial, Cultural and Spiritual Care).
MSPC 615	Self-Care	Hospice and palliative care professionals are at high risk for burnout. Participants in this course will learn about common sources of stress in this field, what self-care is, and why healthcare professionals should practice self-care. Participants will learn several techniques to practice daily self-care.
THAN 604	Death and Dying: Ethical and Legal Considerations	This course provides participants with the information and skills needed to address ethical and legal concerns related to palliative and end-of-life care. Emphasis will be placed on developing a knowledge base of key concepts and strategies that can be used to prevent and resolve problems that are specific to palliative and end-of-life care, including advance directives, cardiopulmonary resuscitation, suffering, withholding and withdrawing life-sustaining treatments, organ donation, and assisted suicide.

**Electives in Thanatology Track (completing these 12 credits = graduate certificate “Aging and Applied Thanatology”)\* existing certificate**

THAN 604	Death and Dying: Ethical and Legal Considerations	See above
THAN 605	Palliative Care	In this course on end-of-life care, participants will learn practical skills to assist people who are facing incurable illnesses, such as cancer, severe cardiovascular disease, and progressive neurodegenerative diseases. Topics will include pain and symptom management strategies, both conventional and complementary, determination of terminal prognosis, hospice care, palliative care emergencies, and discussion of advance directives.
THAN 606	Caring for the Bereaved	In this course, participants will learn the prominent theories of grieving and the grief reaction, as well as the empirically-based therapeutic interventions available to support and care for the bereaved. Participants will learn to distinguish between anticipatory grief, normal grief, and complicated grief and to identify factors that affect the grieving process. This course also explores reflective practice and self-care for the end-of-life care professional while learning to support those who are dying and those who are grieving.
THAN 609	Psychosocial Perspectives in Aging	This course explores the psychological and social aspects of adult development within the context of the ongoing process of aging. Topics include psychological, sociological, biological, psychological theories of aging.

<b>Required Core Courses (6 credits)</b>		
MSPC 616	Research and Outcomes Assessment in Hospice and Palliative Care	Participants in this course envision and plan a pilot project designed to assess clinical, economic or humanistic outcomes in hospice or palliative care. Students will learn how to establish a research question, establishing appropriate methods, and select outcomes to assess. Deliverable will be a proposal that is suitable for submission to an institutional review board.
MSPC 617	Advanced Team-Based Palliative Care	This course is entirely case-based, and uses the interprofessional/interdisciplinary approach to the resolution of complex cases of patients with advanced illnesses. Participants will have to rely on team members to achieve optimal patient outcomes. (Must be taken in last semester).

### **B1C. How general education requirements will be met.**

The program will be conducted completely through distance education using Blackboard as the learning management system (LMS). Learning objects will be posted in the LMS and include pre-recorded lectures, pre-recorded video interviews with experts in the field, readings, discussion boards and links to interactive computer-based exercises. Participants will participate in web conferencing, and online active-learning instruction both independently and in groups. A student will be able to complete the program in two years but may take up to five years as desired to complete all program requirements.

### **B1D. Graduate Certificates**

Students who successfully complete the first four core courses (MSPC 601, 602, 603, 604) will be awarded a Graduate Certificate titled "Principles and Practice of Hospice and Palliative Care."

Students who successfully complete four courses (12 credits in a given track) will be awarded a Graduate Certificate as follows:

- "Clinical Aspects of Palliative Care" (MSPC 605, 606, 607, 608)
- "Psychosocial/Spiritual Aspects of Palliative Care" (MSPC 609, 610, 611, 612)
- "Leadership and Administration in Palliative Care" (MSPC 613, 614, 615 and THAN 604)
- "Aging and Applied Thanatology" (THAN 604, 605, 606, 609)

### **B2. Provisions for evaluation of program**

Extensive curricular mapping has been completed to assure each terminal performance objective (see above) is introduced, emphasized, and reinforced through required and elective coursework (see Appendix A). Successful completion of coursework will demonstrate student achievement of terminal performance objectives.

All faculty in this program will successfully complete a training program on effective techniques in online teaching as provided by the University of Maryland Baltimore Graduate School. Best practices will be emphasized with liberal use of examples and how to operationalize these techniques, and how to assess success. Faculty will be instructed on "Standards from the QM [Quality Matters] Higher Education Rubric, Fifth Edition" including the 8 standards which cover 43 elements of assessment for an online course. An Assessment Committee will review each online course annually using this rubric to assure quality. If necessary, a corrective plan will be provided by the Assessment Committee to the Program Director. Faculty will be provided with annual educational programs to continue their development as online educators.

Student retention for both the graduate certificates and the Master of Science in Palliative Care will be tracked. Both student and faculty satisfaction will be assessed after each course.

**B3. Consistency with the State's minority student achievement goals (as outlined in COMAR 13B.02.03.05 and in the State Plan for Postsecondary Education).**

The University of Maryland Baltimore enjoys robust cultural diversity and minority student enrollment in all academic programs. Specifically, in 2015 43.4% of all master's level candidates were minority students and 42.4% of students enrolled in professional practice doctorate programs were of minority status. Clearly our campus makes students of all cultures feel welcome, and they thrive accordingly. As stated above, per the mission statement, the University of Maryland Baltimore "explicitly values civility, diversity, collaboration, teamwork, and accountability."

Recruitment for the Master of Science in Palliative Care will include advertising and targeted recruitment to top health professional programs for African Americans (<http://www.bestcollegesforblacks.com/HEALTHPROFESSIONS.html>). Two modest scholarships will also be provided through a competitive application process annually to encourage financially disadvantaged learners to apply to the program.

**B4. Relationship to low productivity programs identified by the Commission**

The proposed Master of Science in Palliative Care is not directly related to an identified low productivity program.

**B5. Critical and compelling regional or Statewide need as identified in the State Plan**

As described in Section A, we have a dramatic shortage of hospice and palliative care practitioners in the United States, in a range of practice environments (hospitals, nursing homes, home-based hospice, assisted living, and ambulatory care). Practitioners receive little education in their professional degree programs, and practitioners currently in practice cannot afford to give up their careers to seek additional training. Legislation has been introduced calling for interdisciplinary education and training in palliative care for physicians, registered nurses, advanced practice nurses, physician assistants, social workers and other health care professionals.<sup>4</sup>

According to the "Workgroup Report on Hospice Care, Palliative Care and End of Life Counseling," 80% of large hospitals 63% of mid-size hospitals, and no small hospitals in Maryland have a palliative program.<sup>5</sup> One of the recommendations of this group was "The education of practitioners in end of life counseling is critical to the improvement of patient and family satisfaction with the quality of end of life care. Thus, the workgroup recommends that hospitals and professional schools be encouraged to improve end of life counseling education at teaching hospitals/professional schools in Maryland for all provider levels" with similar recommendations for the physical and psychosocial/spiritual care of Maryland citizens. The Maryland Health Commission published the report "Maryland Hospital Palliative Care Programs: Analysis and Recommendations in December 2015 made 37 best practice recommendations within eight domains, including the need to develop palliative care programs in all Maryland hospitals, and the need to seek and provide education and training to all health professionals in palliative care to "ensure that professional staff are confident in their ability to provide palliative care for patients [in Maryland]."<sup>6</sup>

Our commitment to recruit health professionals from minority groups will further serve to meet the hospice and palliative care needs of Maryland citizens (and nationally). Spruill and colleagues report that 77% of respondents would be more willing to use hospice care if hospice teams were more racially diverse.

## **B6. Quantifiable & reliable evidence and documentation of market supply & demand in the region and State**

As described in the previous section (B5) there is a clear and urgent need for trained palliative care providers. The lack of skilled palliative care providers is the primary barrier to the State of Maryland objective to develop a palliative care presence in all hospitals. Additionally, only a handful of Maryland hospitals have an out-patient palliative care service available, another urgent need.

A survey was conducted investigating the level of interest in a Master of Science degree in Palliative Care conducted through online learning. Two hundred sixteen respondents completed the survey. All respondents practice in hospice and palliative care and represented administrators, advanced practice nurses, bereavement specialists, chaplains, licensed practical nurses, nurses, nursing assistants, pharmacists, physicians, physician assistants, social workers, volunteer coordinators. Approximately 50% of respondents had been in practice 16 years or more, but 50% had 5 or fewer years' experience in hospice and palliative care. Ninety percent of respondents had not completed any formal post-graduate training in hospice or palliative care. When asked "how interested are you in obtaining additional formal training in hospice and palliative care" 49% responded "yes, definitely" and 41% responded "yes, possibly." When specifically queried about level of interest in a Master of Science in Palliative Care through the University of Maryland Baltimore, 32% responded "yes, definitely" and 44% responded "yes, possibly." For those not interested in obtaining a Master's degree at this time, 54% stated they were definitely interested in taking a few course as continuing education credit or as a graduate certificate. The most common response to "other comments or thoughts" was "When will it start!"

Almost 75% of respondents rated the ability to work asynchronously in an online environment as very important. Almost 80% rated the flexibility in scheduling as very important as well.

Approximately 12 hospice/palliative care expert interviews were conducted as part of the needs assessment for this program. Every administrator interviewed stated they would highly value, and reward, potential employees who had earned a graduate certificate or Master of Science degree in palliative care. While not all graduates will be in search of a new position, those who wish career advancement or to enter the field of hospice and palliative care will easily find a position in Maryland and beyond.

## **B7. Reasonableness of program duplication**

There are no other Master of Science programs in Palliative Care in Maryland or the midatlantic region. There is only one other Master of Science in Palliative Care program approved in the US, the University of Colorado (begins Fall 2016). Their program is a hybrid of online learning and several required face-to-face sessions on the campus in Denver. The Colorado program is specifically targeting advanced practice nurses, physicians, physician assistants and pharmacists; the UMB proposal is for all practitioners that provide hospice and palliative care (as above, plus social workers, chaplains, and grief/bereavement specialists). There are several Master's programs internationally but they are either hybrid or entirely face-to-face. There are a handful of Palliative Care Certificate Programs in the US, and palliative care tracks in nursing programs.

## **B8. Relevance to Historically Black Institutions (HBIs)**

No HBIs in Maryland offer a program that is comparable to the proposed Master of Science in Palliative Care at UMB. Thus there will be no negative impact on HBIs.

**B9. If proposing a distance education program, please provide evidence of the [Principles of Good Practice](#) (as outlined in COMAR 13B.02.03.22C).**

Curriculum and Instruction – This program has been conceived and planned by the Program Director, Dr. Mary Lynn McPherson, Professor and Executive Director of Advanced Post-Graduate Education in Palliative Care at the University of Maryland School of Pharmacy. Dr. McPherson also holds an appointment at the University of Maryland Baltimore Graduate School. Dr. McPherson is internationally known in the field of hospice and palliative care both as a clinician and educator. She has practiced in this field since graduation in 1986, and been a faculty member at the University of Maryland since 1990. Dr. McPherson has received many awards for her innovative clinical practice, and is a frequent presenter at national and international meetings. She has similarly received numerous awards for her teaching acumen as selected by graduating students numerous times, the University of Maryland Baltimore Campus (Founder's Day Teacher of the Year, 2012) and the prestigious Robert Chalmers Distinguished Educator Award (2013) from the American Association of Colleges of Pharmacy. McPherson earned a Master of Arts degree and two graduate certificates from UMBC in Instructional Systems Development (2014) and will be completing a Master of Science degree in Distance Education in 2016 from UMUC.

Curricular mapping was conducted with exacting detail in planning this program. The following resources were used to develop terminal performance objectives for this program:

- Clinical Practice Guidelines for Quality Palliative Care published by the National Consensus Project for Quality Palliative Care National Quality Forum
- The Joint Commission Palliative Care Certification Requirements – Palliative Care Certification Program
- The Hospice and Palliative Medicine Entrustable Professional Activities (American Academy of Hospice and Palliative Medicine)
- American Board of Medical Specialties or American Osteopathic Association Bureau of Osteopathic Specialists board certification in hospice and palliative medicine
- Hospice Medical Director Certification Board (HMDCB) exam for Hospice Medical Directors
- Certification exam competency statements from Hospice and Palliative Credentialing Center for:
  - Advanced and Certified Hospice and Palliative Nurse (ACHPN)
  - Certified Hospice and Palliative Nurse (CHPN)
  - Certified Hospice and Palliative Pediatric Nurse (CHPPN)
  - Certified Hospice and Palliative Licensed Nurse (CHPLN)
  - Certified Hospice and Palliative Care Administrator (CHPCA) – Advanced Certified Hospice and Palliative Social Worker (ACHP-SW)
- Board of Chaplaincy Certification, Inc. palliative care specialty certification

Based on the amalgamation of these competency statements, the terminal performance objectives were crafted (see above) and curriculum was developed. Every terminal performance objective is introduced in one of the first four courses. Each terminal performance objective is then emphasized in one or more of the elective courses, and all objectives are reinforced in the final two required courses. The choice of electives and specialized tracks allows for self-determined learning as planned by each participant.

It is anticipated that students in this program will be interprofessional, and faculty will be similarly represented (medicine, nursing, pharmacy, social work, chaplaincy, thanatology, administrative).

Role and Mission – As discussed above, the proposed program is consistent with the mission of the University of Maryland Baltimore. Proposed program faculty have extensive teaching experience in distance education, and continued training and support will be provided. The program will employ existing exceptional technolo-

gy to produce and delivery pre-recorded lectures (e.g., recording studio), to conduct web conferences (e.g., Blackboard Collaborate) and to design and delivery active-learning instructional activities.

**Faculty Support and Learning Resources** - All faculty teaching in this program will satisfactorily complete a training program on distance education provided by the University of Maryland Baltimore Graduate School. Education specialists, instructional system designers and instructional technologists through the Graduate School will be working hand-in-hand with faculty to develop learning activities.

**Students and Student Services** – The program will make use of established mechanisms in the Graduate School and School of Pharmacy to provide students with clear, complete and timely information on the curriculum, course and degree requirements, nature of faculty/student interaction, assumptions about technology competence and skills, technical equipment requirements learning management system, availability of academic support services and financial aid resources, and costs and payment policies. For example, course materials will be available through Blackboard, a web-interface with which faculty have many years of experience, including with current programs.

Accepted students will have the background, knowledge, and technical skills needed to undertake a distance education program. Minimally candidates for admission will possess a baccalaureate degree; the majority will have a health professional degree (RN, MD, PharmD, LCSW, etc.). The target student is a health professional who works in hospice and palliative care or wishes to transition to the field. Recruitment and admissions materials about the program will represent the program and the services available (e.g., need for students to have access to computer that meets the minimum system requirements, broadband internet access, and a headset microphone for participation in web conferences).

**Commitment to Support** – Policies for faculty evaluation already include consideration of teaching and scholarly activities related to ongoing distance education programs. We are committed to continuation of the program for a period sufficient to enable students to complete the MS degree.

**Evaluation and Assessment** – The School of Pharmacy and Graduate School have a culture and support structure to assess program educational effectiveness. As described above, an Assessment Committee will review each online course annually using the Quality Matters rubric. Student retention and satisfaction, and faculty satisfaction will be assessed continuously. Faculty will be provided with initial and annual educational programs to continue their development as online educators.

An advisory committee the represents disciplines from all schools on campus has been assembled and reviews and provides feedback on every aspect of program development, which will continue during implementation.

## **C. Resources and Finance**

### **C1. Adequacy of faculty resources (as outlined in COMAR 13B.02.03.11).**

Provide a brief narrative demonstrating the quality of program faculty. Include a summary list of faculty with appointment type, terminal degree title and field, academic title/rank, status (full-time, part-time, and adjunct) and the course(s) each faulty member will teach.

**Faculty who will be teaching in this program include:**

Faculty Members	Area(s) of Expertise
<ul style="list-style-type: none"> <li>• <b>Mary Lynn McPherson, PharmD, MA, BCPS, CPE</b> <ul style="list-style-type: none"> <li>○ Professor, University of Maryland School of Pharmacy</li> <li>○ Executive Director, Advanced Post-Graduate Education in Palliative Care</li> <li>○ Program Director, Master of Science, Palliative Care</li> </ul> </li> </ul>	Program Director Clinical courses Education elective
<ul style="list-style-type: none"> <li>• <b>Nina Bemben, PharmD, BCPS</b> <ul style="list-style-type: none"> <li>○ Assistant Professor, University of Maryland School of Pharmacy</li> </ul> </li> </ul>	Clinical courses
<ul style="list-style-type: none"> <li>• <b>Mary Jo Bondy, D.H.Ed., MHS, PA-C</b> <ul style="list-style-type: none"> <li>○ Assistant Dean of Graduate Academic Programs, Director of Graduate School, University of Maryland Baltimore Graduate School</li> </ul> </li> </ul>	Clinical courses Psychosocial spiritual courses
<ul style="list-style-type: none"> <li>• <b>John Cagle, MSW, PhD</b> <ul style="list-style-type: none"> <li>○ Assistant Professor, University of Maryland School of Social Work</li> </ul> </li> </ul>	Psychosocial spiritual courses
<ul style="list-style-type: none"> <li>• <b>Delia Chiaramonte, MD</b> <ul style="list-style-type: none"> <li>○ Associate Director and Director of Education, Center for Integrative Medicine</li> <li>○ University of Maryland School of Medicine</li> </ul> </li> </ul>	Clinical courses Self-care elective
<ul style="list-style-type: none"> <li>• <b>Constance Dahlin, MSN, ANP-BC, ACHPN</b> <ul style="list-style-type: none"> <li>○ Director of Professional Practice, Hospice and Palliative Nurses Association</li> <li>○ Consultant, Center to Advance Palliative Care</li> <li>○ Palliative Nurse Practitioner, North Shore Medical Center</li> </ul> </li> </ul>	Principles course Clinical courses
<ul style="list-style-type: none"> <li>• <b>Jon P. Furuno, Ph.D.</b> <ul style="list-style-type: none"> <li>○ Associate Professor, Department of Pharmacy Practice, OSU/OHSU College of Pharmacy</li> </ul> </li> </ul>	Research course
<ul style="list-style-type: none"> <li>• <b>Chuck Hodell, PhD</b> <ul style="list-style-type: none"> <li>○ Deputy Provost and Professor - National Labor College</li> <li>○ Associate Director and Professor – UMBC, Instructional Systems Design</li> </ul> </li> </ul>	Education elective
<ul style="list-style-type: none"> <li>• <b>Karen Snow Kaiser, PhD, RN</b> <ul style="list-style-type: none"> <li>○ Clinical Practice Coordinator, University of Maryland Medical Center</li> </ul> </li> </ul>	Administrative courses Clinical courses
<ul style="list-style-type: none"> <li>• <b>Shirley Otis-Green, MSW, ACSW, LCSW, OSW-C</b> <ul style="list-style-type: none"> <li>○ Clinical Director of Consulting Services, Coalition for Compassionate Care of California</li> </ul> </li> </ul>	Psychosocial spiritual courses
<ul style="list-style-type: none"> <li>• <b>Michelle J. Pearce, PhD, BCC</b> <ul style="list-style-type: none"> <li>○ Assistant Professor, Center for Integrative Medicine, Department of Family and Community Medicine, University of Maryland School of Medicine</li> <li>○ Adjunct Assistant Professor, Department of Psychiatry and Behavioral Sciences, Duke University Medical Center</li> </ul> </li> </ul>	Psychosocial spiritual courses
<ul style="list-style-type: none"> <li>• <b>Douglas Ross, MD</b> <ul style="list-style-type: none"> <li>○ Professor, University of Maryland School of Medicine</li> </ul> </li> </ul>	Clinical courses
<ul style="list-style-type: none"> <li>• <b>Leah Sera, PharmD, BCPS</b> <ul style="list-style-type: none"> <li>○ Assistant professor, University of Maryland School of Pharmacy</li> </ul> </li> </ul>	Clinical courses
<ul style="list-style-type: none"> <li>• <b>Vincent Jay Vanston, MD, FAAHPM</b> <ul style="list-style-type: none"> <li>○ Palliative Medicine Physician, Cooper University Hospital</li> </ul> </li> </ul>	Clinical courses

<ul style="list-style-type: none"> <li>• <b>Kathryn A. Walker, PharmD, BCPS, CPE</b> <ul style="list-style-type: none"> <li>○ Associate Professor, University of Maryland</li> <li>○ Senior Clinical Director of Palliative Care, MedStar Health</li> </ul> </li> </ul>	Clinical courses Administrative courses
<ul style="list-style-type: none"> <li>• <b>Debra Wiegand RN, PhD, FAAN</b> <ul style="list-style-type: none"> <li>○ Associate Professor, University of Maryland School of Nursing</li> </ul> </li> </ul>	Clinical courses

## **C2. Adequacy of library resources**

The University of Maryland Baltimore Health Sciences and Human Services Library is an excellent resource for students in palliative care. The library carries a wide range of hospice and palliative care related electronic publications. The library also provides extensive online interactive resources designed to enhance information literacy. In each students will be asked to complete projects, presentations and review and interpret literature. The library offers electronic access that will allow students from any location to complete these requirements. The program is to be implemented within existing institutional resources.

## **C3. Adequacy of physical facilities, infrastructure and instructional equipment**

The physical facilities, infrastructure and instruction equipment are adequate to initiate this program. The program will leverage existing at-a-distance instructional technologies. The program is to be implemented within existing institutional resources. The University of Maryland Baltimore Graduate School offers excellent support for the Master's Program. The School of Pharmacy has an existing recording studio that is highly functional, and faculty desktop computers are configured for personal recording as necessary. Instructional technologists from the Graduate School are available for assistance as faculty require.

## **C4. Adequacy of financial resources with documentation**

No new general funds are required. A modest amount of departmental revolving funds will be used to support the program for the first two years.

Expenditures to support the program include .75FTE faculty, payments to highly specialized external faculty, a program manager (part time), a portion of a senior educational technology position, support costs payable to the graduate school, marketing, licensing and course materials.

#### **D. Resources and Expenditures**

**TABLE 2: EXPENDITURES**

<b>Expenditure Categories</b>	<b>Category</b>	<b>Year 1 FY 17</b>	<b>Year 2 FY 18</b>	<b>Year 3 FY 19</b>	<b>Year 4 FY 20</b>	<b>Year 5 FY 21</b>
1. Total Faculty Expenses (b + c below)		\$39,900	\$119,700	\$119,700	\$119,700	\$119,700
a. # FTE		0.75	0.75	0.75	0.75	0.75
b. Total Salary		\$30,000	\$90,000	\$90,000	\$90,000	\$90,000
c. Total Benefits		\$9,900	\$29,700	\$29,700	\$29,700	\$29,700
2. Total Administrative Staff (b + c below)			\$70,900	\$70,900	\$70,900	\$70,900
a. # FTE			0.70	0.70	0.70	0.70
b. Total Salary			\$50,000	\$50,000	\$50,000	\$50,000
c. Total Benefits			\$20,900	\$20,900	\$20,900	\$20,900
3. Total Support Staff Expenses (b + c below)		\$0	\$38,275	\$53,427	\$54,592	\$59,254
a. # FTE			0.54	0.75	0.77	0.84
b. Total Salary			\$26,992	\$37,678	\$38,499	\$41,787
c. Total Benefits			\$11,283	\$15,749	\$16,093	\$17,467
4. Equipment				\$5,000	\$15,000	\$20,000
5. Course Materials, Marketing, School licensing costs		\$12,500	\$30,500	\$35,605	\$40,768	\$54,416
5. b Allocated Software Costs			\$20,000	\$20,000	\$20,000	\$20,000
6. Payments to External Instructors		\$2,500	\$35,000	\$35,000	\$40,000	\$40,000
7. Graduate School Charges for Exp.		\$8,500	\$23,000	\$27,500	\$12,000	\$12,000
<b>Total (Add 1-7)</b>		<b>\$63,400</b>	<b>\$337,375</b>	<b>\$367,132</b>	<b>\$372,960</b>	<b>\$396,270</b>

**Excess Revenues over Expenditures**

\$0      \$0      \$0      \$0      \$0

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