II. PROJECT DESCRIPTION

A. Title:

Combined Oncology and Hospice & Palliative Medicine Training

B. Goals and Objectives

The American Society of Clinical Oncology advocates that the integration of palliative care be accomplished throughout the course of cancer treatment, regardless of prognosis, because patient outcomes are better(1). Since 2008 when hospice & palliative medicine became formally recognized as a subspecialty, 630 physicians have obtained dual certification in both oncology and hospice & palliative medicine. In the intervening years, residents have independently sought training in both fields in a sequential fashion. In the past few years, ASCO has received member requests to advocate for a combined training option.

Goal: Pilot the ability of a combined training program in oncology and hospice and palliative medicine to equip fellows with the competencies of both subspecialties in a training scheme that reduces total time in training.

Objectives:

1. Enable oncologists who want to be experts in both cancer care and palliative care to obtain needed competencies in an integrated training program.
2. Eliminate the requirement for the research training component from traditional medical oncology or hematology/oncology training and offer it as an option (waiver required).
3. Enhance the educational value of combined training by integrating the two specialties, allowing for “crosstalk” and symbiotic learning of members within each department and within each institution.
4. Identify clinical rotations where both oncology and palliative medicine competencies can be learned (waiver required).
5. Condense the time commitment required for consecutive training in currently accredited training programs by 1 year.
6. Embrace a competency-based approach to curriculum design and assessment in the combined training program.

C. Description of the Innovation

Briefly describe the innovation (or experimentation), including changes or improvements from the current process and the anticipated outcomes. If the innovation requires a request for waiver/variation/suspension of common, institutional, and/or specialty-specific requirements, provide the exact requirement reference (e.g., Common Program Requirements, Section, etc.). Include current methods for requirement compliance and how that will change. A diagram highlighting key design features and processes is encouraged.

Current ABIM Training Time Standards				
Medical Oncology	24 months total	12 clinical months	12 elective/research mo	
Hematology / Medical Oncology	36 months total	12 clinical months	6 clinical heme	18 months elective/research mo
Hospice & Palliative Medicine	12 months total	12 clinical months		

Current State. As shown in the table above, Medical Oncology is currently 24 months (2 years) in duration. Hematology and Medical Oncology is currently 36 months (3 years) in duration. Hospice & Palliative Medicine is 12 months (1 year) in duration. Currently, physicians wanting training that includes hospice and palliative medicine must pursue this training consecutively.

AIRE Proposal. As shown in the table below, in option 1, institutions may offer a combined training program in medical oncology and hospice & palliative medicine of 24 months total duration. Those 24 months are all clinical and do not represent a reduction in total clinical training in each discipline. In option 2, a combined training program in hematology/oncology and hospice & palliative medicine of 36 months total duration can be offered. Only 6 months of the 3-year training scheme are devoted to elective or research time. In both options, a ½ day continuity outpatient clinic experience is required throughout the duration of fellowship training. If an individual institution has an outpatient clinic where both palliative care and oncology are practiced, then that could continue for the duration. However, in those settings where outpatient oncology and palliative care are practiced in separate settings, time between the 2 will be equally divided. For simplicity, the diagram shows them as all oncology in one year, and all hospice & palliative medicine in the other year. Individual institutions may mix the training between the specialties as described later in the document. Participating institutions who want to offer an additional year or more of research may do so, but it is not required for board eligibility.

	Months	1	2	3	4	5	6	7	8	9	10	11	12	
Option 1	Combined Onc/HPM Year 1													24 months total clinical training
	Combined Onc/HPM Year 2													
Option 2	Combined HemeOnc/HPM Year 1													36 months total
	Combined HemeOnc/HPM Year 2													
	Combined HemeOnc/HPM Year 3													

This program is innovative for 2 reasons. First, The American Society of Clinical Oncology (ASCO) is submitting the proposal on behalf of 20 institutions who expressed interest in participating. . Never before have so many institutions been willing to collaborate outside of clinical cancer trials. Second, the innovation offers the option to decrease the total duration of training by 1 year by omitting 12 months of elective/research time from standard medical oncology or from standard hematology/oncology training. While individual institutions may opt to include an additional research year if they are training future clinical scientists, it is not required for this particular pilot project.

Combination of clinical elements may serve to develop competencies in both oncology and hospice & palliative medicine (waiver required). There are 3 areas in existing training programs where programs can ‘double count’ the clinical time toward both oncology and palliative medicine.

Inpatient Hospital Consultation Services.

In most hospitals, inpatient oncology consultation is heavily weighted towards patients with advanced cancers. Particularly if the teaching component includes **both** the oncology and palliative medicine features of the cases, the program may count a maximum of 3 months of inpatient hospital consultation for **both** the oncology and palliative medicine components of the combined training.

If the institution chooses to count an inpatient hospital consultation service clinical rotation toward both subspecialties, the OPM supervising committee is responsible for assuring the clinical experiences are appropriately supervised, taught and assessed.

1. Supervision. A faculty member who is board certified in both oncology and hospice & palliative medicine may be the teaching faculty. Otherwise, faculty from both oncology and hospice & palliative medicine will need to participate.

2. Teaching. The fellow will keep a log of patients on rotations that count for both oncology and hospice & palliative medicine with a notation of the oncological issue and the hospice & palliative medicine issues managed.
3. Assessment. The supervising attending for each clinical rotation will review the log at the end of each rotation. The OPM supervising committee will review the log annually for purposes of ensuring that the experiences are adequate to accomplish the learning objectives for both oncology and hospice & palliative medicine.

Dedicated Inpatient Hospital Specialty Unit Services

Outside of hematologic malignancies and transplant units, inpatient oncology units are heavily weighted towards management of the symptoms of advanced disease and/or complications of therapy. Consequently, in such hospitals, particularly if the teaching component includes **both** the oncology and palliative medicine features of the cases, the program may count a maximum of 3 months of inpatient oncology unit for **both** the oncology and palliative medicine components of the combined training.

If the institution chooses to count a hospital specialty unit clinical rotation toward both subspecialties, the OPM supervising committee is responsible for assuring the clinical experiences are appropriately supervised, taught and assessed.

4. Supervision. A faculty member who is board certified in both oncology and hospice & palliative medicine may be the teaching faculty. Otherwise, faculty from both oncology and hospice & palliative medicine will need to participate.
5. Teaching. The fellow will keep a log of patients on rotations that count for both oncology and hospice & palliative medicine with a notation of the oncological issue and the hospice & palliative medicine issues managed.
6. Assessment. The supervising attending for each clinical rotation will review the log at the end of each rotation. The OPM supervising committee will review the log annually for purposes of ensuring that the experiences are adequate to accomplish the learning objectives for both oncology and hospice & palliative medicine.

Ambulatory Outpatient Continuity Clinic

Both the oncology and hospice & palliative medicine requirements include a ½ day per week continuity clinic experience. In some institutions, this may count for **Both** oncology and palliative medicine requirements if the patients seen have advanced disease, meaning Stage III and Stage IV cancers since anti-cancer treatment and palliation of the physical, emotional, practical and spiritual dimensions of the cancer experience should go hand-in-hand.

If the institution chooses to count an ambulatory outpatient clinical rotation toward both subspecialties, the OPM supervising committee is responsible for assuring the clinical experiences are appropriately supervised, taught and assessed.

7. Supervision. A faculty member who is board certified in both oncology and hospice & palliative medicine may be the teaching faculty. Otherwise, faculty from both oncology and hospice & palliative medicine will need to participate.
8. Teaching. The fellow will keep a log of patients on rotations that count for both oncology and hospice & palliative medicine with a notation of the oncological issue and the hospice & palliative medicine issues managed.

9. Assessment. The supervising attending for each clinical rotation will review the log at the end of each rotation. The OPM supervising committee will review the log annually for purposes of ensuring that the experiences are adequate to accomplish the learning objectives for both oncology and hospice & palliative medicine.

D. Methodology and Evaluation

Describe in detail the specific changes to the curriculum and assessment program (See Appendix B for guidance). Describe how the innovation will improve graduate medical education and improve learner and patient outcomes. For example, how will the project improve the learning environment and resident education? How will it improve patient care quality/continuity/access/outcomes and/or better support the reporting and tracking of competency? How might the innovation help address remediation challenges with struggling residents and fellows? Given robust, rigorous assessment is essential to effective competency-based medical education, provide examples of what assessment approaches and instruments will be used in this pilot. This proposal should also assess the effectiveness (reliability, validity, feasibility, cost effectiveness, educational impact and acceptability) of proposed assessment tools and faculty development activities aimed at improving effectiveness. As noted above, if new assessment approaches are to be used, the proposal must describe how the new approaches will be studied.

The specific requests in section D have been broken out to allow for specific responses.

The combined fellowship training program will be offered by training hospitals with both Hematology/Oncology and Hospice & Palliative Medicine accredited training programs.

The Hematology/Oncology Fellowship Program Director(s) and the Hospice & Palliative Medicine Fellowship Program Director at each site will participate in the Hematology/Oncology and Palliative Medicine (OPM) Fellowship Oversight Committee, along with at least one additional representative from each institution with an interest in medical education and expertise in program evaluation and/or assessment. The committee does not require members to be board certified in both hematology/oncology and hospice & palliative medicine as there are too few at the time of this AIRE proposal.

Initial application and selection of the candidate will occur through the creation of a separate track for matching into hematology/oncology fellowship programs at the sponsoring and each collaborating institution through the National Resident Matching Program (NRMP). Each participating Oncology fellowship program will create an “Oncology-Hospice & Palliative Medicine” (OPM) track through their GME Offices with a quota of one (which can be reverted to their standard clinical track if unfilled). Announcement of this pilot program will be arranged through information placed on each participating program’s webpage for potential applicants and communications with the American Society of Clinical Oncology, including its Fellowship Directors group, the American Academy of Hospice and Palliative Medicine, the Alliance for Academic Internal Medicine, and Association of Program Directors in Internal Medicine.

Participating medical oncology/hematology programs and/or hospice and palliative medicine training programs may request complement increases to accommodate OPM track fellows or they may dedicate existing positions. Candidates must be highly qualified third-year (PGY-3) internal medicine residents in an ACGME-accredited residency program (PGY-4 if doing a Chief Resident year) or be board certified by the American Board of Internal Medicine within three years of graduation from ACGME-accredited Internal Medicine residency program. Internal medicine residents who are doing a ‘gap year’ such as a hospitalist role after graduating from an internal medicine residency are also eligible. Although Hospice and Palliative Medicine is open to 9 different specialties, this pilot program will be open only to internal medicine residents.

D1) Curriculum Changes (provide narrative describing how the pilot will change curriculum in participating programs and complete the table)

The OPM Fellowship Oversight Committee at each institution will work closely with both fellowship program's Clinical Competency Committees (CCCs) to monitor fellow progression towards unsupervised practice in the Entrustable Professional Activities (EPAs) and ACGME Reporting Milestones for Hematology and Medical Oncology and Hospice & Palliative Medicine and report on this progress at least twice annually to each institution's Graduate Medical Education Committee (GMEC). Progress will be reported to the institutional graduate medical education committee.

It is anticipated that each fellow pursuing the combined training will have individual reasons for pursuing the combined training. Therefore, each fellow will develop an individualized learning plan in conjunction with the program directors. This will be reviewed twice annually at around the same time the CCC meets to review progress toward the milestones. As with many trainees, the individualized learning plan may change as the fellow matures and the learning and career objectives change.

This Committee may also create additional competency assessment tools specifically for these fellows that will be used at each participating program in conjunction with their individual learning plans. At the end of the combined training period, contingent upon their demonstration of milestone-based competence in each field sufficient for independent practice without supervision, the fellow will be eligible to take ABIM initial certification examinations in both specialties.

Current Oncology and Hospice & Palliative Medicine fellowship training programs employ both time and competency-based assessments and advancement approaches. Fellows are expected to achieve competence on ACGME Reporting Milestones over the course of the combined training program indistinguishable from physicians who complete standard training in both subspecialties. It is not expected that the competencies in one subspecialty (e.g. oncology) will be achieved before the other (e.g. hospice and palliative medicine). Given the flexibility the institution has in ordering the learning experiences, it is the responsibility of the OPM fellowship oversight committee and the CCC to correlate progress in achieving competencies with the educational program. Deficiencies will be identified, communicated to the trainee, and changes made to the training program in order that the deficiencies be remedied. The programs will continue to use these assessment approaches and validated instruments to assess the progress of the OPM fellows

Competency Area	Describe how this innovation will advance curriculum in the applicable Core Competencies
Patient Care	Improved synthesis of patient and disease specific information necessary for collaborative treatment planning. Improved combination of symptom control and psycho-socio-spiritual support with standard cancer treatment across the trajectory of illness. Provision of holistic, patient centered care and greater attention to the impact of disease on family and caregivers.
Medical Knowledge	Better understanding of the interplay between contemporary approaches to cancer care and approaches to improve symptoms and coping.
Practice-based Learning and Improvement	Better management of patients and their families in the outpatient setting in contrast to using inpatient setting to address symptom control or changes in overall goals of care.
Interpersonal and Communication Skills	Improved communication with patients and families with incorporation of the patient/family values and goals in treatment discussions and

	recommendation in light of accurate diagnostic and prognostic information
Professionalism	Improved self-awareness as it relates to treatment decisions for patients and families and communication.
Systems-based Practice	Better integration of palliative care from diagnosis without regard to prognosis and earlier referral for hospice care when appropriate while reducing use of ED and hospitalization.

D2) Assessment Program (provide a narrative describing the pilot's assessment program and complete the tables). For reference, the table below provides a list of assessment tools/methods that are recommended and can be used for specific competency areas. The proposal should address the assessment of each of the Core Competencies.

Assessment Tool/Method	Targeted Competency
Faculty evaluation	Multiple competencies
Direct observation	Patient Care, Interpersonal and Communication Skills, and Medical Knowledge ("in vivo")
Multi-source feedback	Professionalism, Interpersonal and Communication Skills and Systems Based Practice
Audit and performance data	Practice-based Learning and Improvement and Systems Based Practiced
Simulation (if available)	Procedures (Patient Care and Interpersonal and Communication Skills)
IT exam (in oncology	Medical Knowledge

Fellows will be supervised and assessed by faculty who are experienced in both disciplines; all teaching faculty would be required to be ABIM-certified in Oncology and/or Hospice & Palliative Medicine. Faculty board certified only in hematology who are supervising hematologic malignancy rotations such as leukemia, lymphoma, multiple myeloma and bone marrow transplant rotations will also be eligible faculty. An academic mentor, may assist in developing an educational plan tailored to each fellow's particular needs and ambitions. The mentor may be a core faculty member and sit on the CCC. The academic mentor need not have special qualifications such as board certification in both oncology and hospice and palliative medicine. The most important element of mentorship is that the mentor have a sincere interest and affinity with the trainee and the trainee's learning objectives. We will use the combination of the following assessment approaches

1) Direct observation of clinical skills;
    a. When possible, validated tools will be used to measure components of core competencies;
    b. Entrustment scales will be used to evaluate fellows and determine when they have achieved competence in core competency areas; Nevertheless, the fellow still needs to complete the

required clinical rotations. This pilot contains no plan for fewer rotations or shortened training time if the fellow demonstrates competence sooner in the training year.

2) Chart stimulated recall;
3) Simulation using standardized patients;
4) 360-Degree multi-source evaluations;
5) Knowledge assessments;
    a. When possible, validated tools will be used (e.g. QIKAT-r to assess quality improvement knowledge and application);
6) Structured reflection/Informed self-assessment of learning goals, strengths, and areas for improvement;
    a. Will incorporate self-audit of patient charts to assess compliance with hospice and palliative medicine quality metrics;
7) Evidence-Based Practice (EBP) case log using Ask-Acquire-Appraise-Apply framework;[18]

Development of performance dimension training, frame of reference training, and feedback will be provided to faculty supervising and assessing fellows at all collaborating sites prior to initiation of the program. ASCO will facilitate faculty development as part of its existing fellowship director's program. Faculty will also receive education in assessment and evaluation methodologies prior to initiation of the program. Semi-annual faculty development sessions will be offered at each site for faculty to refresh their skills in direct observation, use of assessment tools, and provision of feedback. All faculty are also expected to participate in local faculty development offerings through their medical schools and GME offices.

Outcomes of faculty development will be evaluated through surveys measuring faculty satisfaction with development activities, and trainee evaluations of faculty members' teaching following each clinical rotation as part of existing ACGME faculty and fellow surveys. In addition, the CCC or the OPM oversight committee will evaluate the quality of the data they receive to permit defensible judgements to be made regarding the fellow's progress.

The fellowship CCC at each site will meet at least twice a year to review the OPM fellow's progress. During the first year of training, existing Medical Oncology CCC's will assess each OPM fellow. During the second year of training, Hospice & Medicine program CCCs will assess each fellow on their discipline-specific milestones. Milestones reporting by the Medical Oncology program will reflect competencies across both disciplines.

Using a developmental model, fellow progress on the reporting milestones will be discussed by the CCC and reported bi-annually to each institution's GMEC and the ACGME. As appropriate, each CCC may identify fellows who require remediation based on failure to satisfactorily achieve required competencies or meet specific thresholds of development. If needed, remediation with a customized, individual learning plan (ILP) with an on-going monitoring plan will be developed and enacted by the MOPM Fellowship Oversight Committee in collaboration with the respective CCC. Any necessary remediation will be overseen by the appropriate Program Director but may be delegated to others at the institution who have special expertise in the area in which remediation is necessary. Fellows are expected to graduate from the MOPM program upon completion of the combined fellowship and competency achievement in all EPAs and other required domains from both subspecialties.

Following completion of training, fellows will continue to be followed by the OPM Fellowship Oversight Committee in order to collect data on the success of the training model. Fellows will be expected to sit for the ABIM Medical Oncology and Hospice & Palliative Medicine board exams, and results will be tracked. Information on graduate practice patterns and career paths, including whether they actively practice specialty hospice and palliative medicine and, or medical oncology, will be collected to assess contributions to the palliative care and oncology workforce. Surveys and interviews of graduated fellows will be collected, as will data from 360-degree multisource evaluations. Yearly surveys will be conducted for 5 years following completion of the combined training path for the OPM fellows as part of this pilot. ASCO will be responsible for this to provide a centralized, coordinated approach to the evaluation of this pilot. The interview with the graduated fellow will include recommendations for improvements in the training program. It is expected that fellows in this program will be small in number and may feel intimidated to give negative feedback because they fear it may impact their future career if the evaluation were done at the program level. Consequently,

ASCO will conduct the interview at some time after the fellow has left the institution and engaged in initial employment.

Assessment Method/Tool	Core Competency (ies) Targeted for Assessment	Assessment of Tool's Effectiveness (High/Medium/Low)*	Rotation or Location of Application	Frequency of Assessment
In-training Exams	**Medical Knowledge**	**High**	**Half-Way point**	**Yearly**
Direct observation by faculty	**Patient Care and Procedural Skills**	**High**	**Each clinical rotation**	**monthly**
360-degree survey	**Professionalism**	**Medium (challenge is getting enough responses for meaningful feedback)**	**Half-Way point**	**Twice yearly**
Direct Observation by Faculty	**Interpersonal and Communication**	**High**	**Each clinical rotation**	**monthly**
Evidence-based practice logs	**Practice-Based Learning and Improvement**	**Medium (The practice logs will list patients with both oncology and palliative medicine issues)**	**Each clinical rotation**	**monthly**
Faculty evaluations	**Systems-based practice**	**High**	**CCC meetings**	**Twice yearly**

*The effectiveness of an assessment tool can be determined using a framework like the Ottawa Framework for Good Assessment (*Norcini J et al. Med Teach 2018*). This framework lists attributes of an assessment tool and asks you to determine how effectively the tool achieves those attributes. Attributes include reliability, validity, reproducibility, feasibility, educational effect (of and for learning), and acceptability. This framework informs judgement regarding the likelihood that an assessment approach will generate good assessment. If a tool lacks any of these attributes, its effectiveness will be substantially diminished. For instance, a tool such as direct observation that is not accepted by faculty (takes too long) or is deemed too expensive (decreased Relative Value Unit (RVU) generation) may be unlikely to be successfully implemented (low effectiveness). Provide a judgment on the effectiveness of the proposed assessment tools. If the assessment tool scores low using this framework, identify potential faculty development activities that may enhance the tool's effectiveness.

Competency	Describe how this innovation will advance assessment in the applicable Core Competencies (If not applicable, state N/A)
Patient Care	N/A
Medical Knowledge	N/A

Practice-based Learning and Improvement	N/A
Interpersonal and Communication Skills	N/A
Professionalism	N/A
Systems-based Practice	N/A

D3) How will the pilot enhance patient outcomes?

ASCO has promulgated practice guidelines that palliative medicine should be integrated throughout the course of cancer care for best outcomes. Yet, oncologists say they do not have the ability and their programs don't have the faculty to teach this. Hospice & palliative medicine physicians do not have the understanding of standard oncology and how palliative care relates to the cancer care to enable optimal integration. This training scheme has the potential to bridge this gap in individual physician trainees. An additional outcome that we anticipate is that each oncology program will have its faculty and programs influenced by the initiation of this combined training program.

D4) How will the pilot enhance learner outcomes? (In addition to general learner outcomes, discuss how the pilot will address support for struggling learners, including how such learners can be reintegrated into existing programs if they cannot continue in the pilot, and what role learners will play in implementing the pilot?)

By combining the Oncology and HPM training, fellows have the opportunity to integrate their learning through out their training. This has the advantage of developing dual specialists with the ability to integrate and flex their practice fluidly in a variety of setting. There is an additional advantage to training in an integrated way if our goal is to develop fully integrated specialists. In the current state, we have the unintended consequence of role modeling that these are separate areas. One is either an oncologist or a palliateur. For an individual with both subspecialties, the role modeling is 'I integrate both skill sets in the care of individual patients and their families'. The science is clear that patient outcomes are best when the two are integrated.

While this AIRE proposal does not require the institution to have dually certified faculty in oncology and hospice & palliative medicine because they are rare, the OPM committee and the CCC have the responsibility to assess the learning environment for evidence of integration. It is not a success if the two cultures remain distinct rather than integrating. At the time of accreditation review, this will be an objective of the reviewer to determine.

This training track aims to make this concrete during training to produce a different kind of clinician and, perhaps, clinician-scientist. If at any time during the first year of a fellow's training (in Oncology or in Hospice and Palliative Medicine) it is determined that he/she will not be ready for promotion into the next training year by the end of the year by the respective CCC and Program Director, they will be retained until they have demonstrated satisfactory competence in all domains. This may require extension of training; the Oncology and HPM Program Directors will determine whether the trainee should be withdrawn from the program and continue in a standard Oncology fellowship path or standard HPM fellowship path with a delayed start.

D5) How will the pilot enhance the learning environment?

In the average institution, oncology and hospice and palliative medicine exist in two different silos. Although there are requests for consultation from oncology to palliative medicine, there isn't much program integration. We hypothesize that when there is collaboration in training, there will be other collaboration amongst faculty and clinical operations that wouldn't have happened without the joint training program. Dual trainees will also enhance the learning of fellows in the traditional solo specialty tracks who are not part of the dual program due to enhancing exposure to both specialties.

D6) Describe how the pilot will enhance the tracking of competency outcomes?

During the first phase of the innovation pilot, the OPM Committee will map the consensus hospice and palliative medicine EPAs and the oncology competencies and associated reporting milestones with specific clinical rotations for purposes of organizing assessment. We anticipate the Hospice and Palliative Medicine Reporting Milestones, and so will use these new milestones 2.0 to organize assessment, rather than the current sub-specialty reporting milestones.

D7) Describe the approach to studying new assessment approaches or tools (if a new approach to assessment is part of this pilot).

We do not anticipate the development and testing of new assessment approaches and tools. Rather, we expect a toolbox of common assessments that programs might use will be developed and compiled and held at ASCO. ASCO currently has a fellowship program directors group that serves as a source of faculty development and assistance. As part of this effort, ASCO will form a subcommittee of its existing fellowship program directors group for the purposes of the members of this AIRE Project. Working together in the preliminary year, they will identify those tools which all might use. For example, an agreed upon Chart Stimulated Recall tool and/or a family meeting communication observation tool might be added. It is possible that individual programs will use the assessment tools they already use for their traditional fellows. However, we anticipate that the engagement with the program directors of the other subspecialty will challenge them to become more rigorous with assessment tools. The consequence will be a benefit to the traditional programs and their faculty.

D8) Describe the faculty development approaches that will ensure participating faculty members understand the goals and objectives of the pilot and can effectively use the assessment tools/methods required for effective programmatic assessment in this pilot.

The faculty are drawn from existing accredited training programs. Faculty development is included as part of ongoing accreditation. We anticipate that the collaboration required for this pilot will enhance cross-talk between programs for their teaching and assessment methods. We anticipate that, analogous to the assessment of trainees, a toolbox of common faculty assessments and development programs will be formed. ASCO will host a meeting platform for all participating programs to compare and contrast their approaches, ask questions, and obtain advice and help. We anticipate that this collaboration will lead all of the program's faculty to grow in their abilities to develop new approaches to teach and assess clinical education.

E. Clinical learning environment impact assessment

Describe how the innovation will assess and monitor the impact on the learning environment, especially if the innovation only involves a subset of learners.

In additions, describe how the innovation will assess and monitor the impact of the learning environment on those learners who are not participating in the innovation but that share the learning environment with those learners that do participate?

The impact of the OPM Fellowship on the clinical learning environment for traditional fellows, faculty, and members of the inter-professional health care team is unknown. Since fellows have a profound effect on the practice of the faculty, we speculate that the oncology patients of the institution will enjoy more attention to symptom prevention and treatment, less chemotherapy in the last weeks of life and more days in hospice care. The percent of oncology patients who die with hospice care will increase.

There are numerous potential positive impacts of the innovation on the learning environment for the non-participating fellows, particularly relating to increased educational exposure of each set of fellows to the other specialty. There could be downsides as well. The issue most on the minds of the faculty from the participating institutions is the combination of fellows in this described OPM pilot with fellows in standard programs of oncology and hospice & palliative medicine training. For example, for a standard oncology program, there are schedules for the year and the sensitivities between trainees of 'who has to do what, when, and how much' has to be perceived as equitable. Therefore, the proposal does not include shortening or eliminating training times based on early demonstrating of competency achievement.

To determine the impact of the model of training on the clinical learning environment, multiple sources of data will be collected. Clinical rotation evaluations from traditional fellows will be examined and compared with historical data. Surveys regarding the impact of the program will be distributed twice yearly to traditional medical oncology fellows (those enrolled in the ACGME-accredited two-year and three-year fellowships), faculty, and inter-professional team members. Focus groups will also be convened annually to discuss the impact of the program. Focus groups will be led by independent individuals not affiliated with the fellowship program or MOPM Fellowship Oversight Committee. The program evaluation data will be reviewed by the OPM Fellowship Oversight Committee and each institution's GMEC.

F. Monitoring

Describe how the program will monitor progress of the implementation of the innovation. The proposal should describe the evaluation plan (i.e., program evaluation; see G below) for the innovation, addressing the overarching questions, what works, for whom, under what circumstances, and why regarding the innovation.

The OPM Fellowship Oversight Committee will monitor the implementation of the OPM fellowship. For the purposes of this pilot, the OPM oversite committee assumes the responsibilities of a program review committee. They will use the framework of Van Melle to assist their oversight of a competency-based medical educational program. (Worksheet in the Appendix). The Committee will meet at least quarterly to review program evaluation data, and to assess whether the program is meeting its desired outcomes. The program directors of both Oncology and Hospice and Palliative Medicine fellowships will also meet with the OPM fellow twice yearly to solicit real-time feedback about the program. The committee will evaluate both the processes of implementation of the OPM training program as well as outcomes and to identify emergent processes and outcomes that occur during the pilot.

G. Program Evaluation

Describe how the overall program will be evaluated, and what evaluation approach will be used. For example, a program might wish to use the Kirkpatrick framework of a logic model to describe its program evaluation plan. These tools and framework provide a systematic and rigorous approach to evaluation that can help to increase the chances of success. Program evaluation approaches can also help identify problems and challenges earlier so that changes and alterations can be made in a timely manner.

The theoretical framework underpinning the proposed innovation is that of self-regulated learning theory. Intrinsic agency of fellows engaged in this pilot will motivate them to seek opportunities for education and attainment of individualized learning goals in order to achieve competence in the practice of Hospice and Palliative Medicine as well as in Hematology/Oncology. A logic model for program evaluation is outlined below.

COPM Fellowship Logic Model

Inputs	Activities	Outputs	Outcomes	Impact
Fellows Faculty members Clinical rotations GME infrastructure OPM Fellowship Oversight Committee Clinical competency committee Program evaluation committee	Standardized patient assessments Written knowledge examination 360-Degree Multi-Source Feedback Direct observation Chart-stimulated recall Narrative self-assessment	Rotation evaluations Fellow Milestones reports Fellow attainment of entrustment on HPM EPAs Fellow attainment of certification by the ABIM Combination practice of oncology and HPM	Incorporation of oncology and palliative medicine in physician's identify Increased acceptance of hospice & palliative medicine in standard oncology Improved attitudes toward direct observation and competency-based assessment approaches among faculty members Determination of time/number of patients seen required for fellows to achieve competence	Increased number of highly proficient oncologists with subspecialist palliative medicine competencies Improved patient outcomes resulting from incorporation of palliative care from cancer diagnosis.

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H. Timeline

Provide the tentative pre-implementation timeline if curriculum and assessment system require further detail.

Preparation: 2021-2022

Establish OPM Committee Membership

Establish Marketing Plan

Establish Budget and Institutional Clinical Rotation Schedules

Establish Plan for Joint Recruitment and Match Determination between oncology and palliative medicine

Provide a timeline that describes the duration of the project. This should include a launch date for the implementation of the pilot and the duration of the pilot.

Year 1: 2022-2023

Selection of fellows for initial year of the pilot by MOPM Fellowship Oversight Committee at each institution

NRMP Match in November/December 2022

Start of fellowship July 2023

Faculty development in the use of direct observation evaluation tools and use of other assessment tools

Faculty development for Clinical Competency Committee Members

Year 2: 2023-2024, First year of pilot implementation

Selection of second year of OPM fellows by OPM Fellowship Oversight Committee at each institution

NRMP Match in November/December 2023

Start of fellowship July 2024

Twice yearly meetings of Clinical Competency Committees

Monthly-quarterly meetings of the OPM Oversight Committee

Biannual meetings of OPM fellow with program directors from medical oncology and palliative medicine program directors

Review at each participating site for possible continuation of the program

Year 3: 2024-2025, Second year of pilot implementation

I. Description of the Measures

Describe the type and frequency of measures by which the innovation will be evaluated. Some of the measures must be outcomes-based in relation to the innovation being proposed.

The OPM Fellowship Oversight Committee will meet quarterly to review data on the program, assess whether the program is on track for success in achieving its desired outcomes. Data used for program evaluation will include:

Rotation evaluations completed by the OPM fellow;

Surveys of faculty supervising faculty members;

Annual ACGME Resident Survey;

Annual ACGME Faculty Survey;

Bi-annual focus groups with supervising faculty and inter-professional team members to discuss their experiences with the innovation;

Review of practice patterns and career paths chosen by graduates of the MOPM fellowship to assess their contributions to the kidney supportive care workforce

J. Criteria for Assessing Degree of Success

Describe the criteria for determining success of the innovation, including the related targets/benchmarks and outcomes. This should be included in the program evaluation plans.

The innovation will be deemed a success if the following criteria are met:

1. 80% of participating programs have at least 1 OPM fellow complete the outlined training;
2. Fellows demonstrate preparedness for independent practice on all EPAs;
3. Fellow attainment of ABIM certification in Medical Oncology (and or Hematology) and Hospice & Palliative Medicine within 2 years of completing training;
4. Perceptions of the innovation by participating faculty and inter-professional team members are positive;
5. Fellows engage in development of cancer supportive and palliative care programs as part of their clinical responsibilities after completion of training program;
6. Other programs ask to participate.

K. **Applicability** Describe how the innovation's goals and anticipated outcomes may apply to other GME programs.

The OPM fellowship training program will serve as a model to other GME programs. The innovation will be relevant to other GME programs whose trainees see a large number of patients with serious illness and for whom competence in palliative care is needed. These may include the surgical and radiation oncology specialties, cardiology, gastroenterology, and critical care/pulmonology, among others.

L. Next Step

Upon successful completion of the innovation timeline, what next steps will be necessary to move the innovation from a pilot to an approved pathway for accreditation and certification? In addition to identifying the steps and stakeholders necessary to defining accreditation and certification requirements for such a pathway, next steps should address the requirements for appropriate assessment of learners and programs, as well as the required faculty development to ensure robust assessment in any future pathway.

ASCO will engage closely with the ABIM and ACGME during the conduct of the 5-year pilot. Through its existing Oncology Fellowship Program Directors Group (membership 150 programs), ASCO will disseminate results and ascertain interest in additional program participation. ASCO, ABIM and ACGME together will determine if there is enough volume and interest to make this an approved pathway for accreditation and certification.