Accreditation Council for
Graduate Medical Education

ACGME Program Requirements for Graduate Medical Education in Radiation Oncology

ACGME approved major revision: June 10, 2018; effective: July 1, 2019

ACGME Program Requirements for Graduate Medical Education in Radiation Oncology

Common Program Requirements are in BOLD

Where applicable, text in italics describes the underlying philosophy of the requirements in that section. These philosophic statements are not program requirements and are therefore not citable.

Introduction

Int.A. **Residency is an essential dimension of the transformation of the medical student to the independent practitioner along the continuum of medical education. It is physically, emotionally, and intellectually demanding, and requires longitudinally-concentrated effort on the part of the resident.**

The specialty education of physicians to practice independently is experiential, and necessarily occurs within the context of the health care delivery system. Developing the skills, knowledge, and attitudes leading to proficiency in all the domains of clinical competency requires the resident physician to assume personal responsibility for the care of individual patients. For the resident, the essential learning activity is interaction with patients under the guidance and supervision of faculty members who give value, context, and meaning to those interactions. As residents gain experience and demonstrate growth in their ability to care for patients, they assume roles that permit them to exercise those skills with greater independence. This concept--graded and progressive responsibility--is one of the core tenets of American graduate medical education. Supervision in the setting of graduate medical education has the goals of assuring the provision of safe and effective care to the individual patient; assuring each resident's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishing a foundation for continued professional growth.

Int.B. Definition

Int.B.1. Radiation oncology is that branch of clinical medicine concerned with the causes, prevention, and treatment of cancer and certain non-neoplastic conditions utilizing ionizing radiation. Radiation oncologists are an integral part of the multidisciplinary management of the cancer patient, and must collaborate closely with physicians and other health care professionals in related disciplines in ~~the management of~~managing the patient.

Int.B.2. The objective of the residency program is to educate and train physicians to be skillful in the practice of radiation oncology, and to be caring and compassionate in the treatment of patients. ~~To accomplish this goal, adequate structure, facilities, faculty, patient resources, and an educational environment must be provided.~~

Int.C. The length of the educational program in radiation oncology must be ~~60~~ 48 months, preceded by ~~in length~~12 months of post-graduate clinical education. (Core)*

I. Institutions

I.A. Sponsoring Institution

One sponsoring institution must assume ultimate responsibility for the program, as described in the Institutional Requirements, and this responsibility extends to resident assignments at all participating sites. (Core)

The sponsoring institution and the program must ensure that the program director has sufficient protected time and financial support for his or her educational and administrative responsibilities to the program. (Core)

I.A.1. The program director should devote a minimum of 10 percent of his or her time to administration of the program. (Core)

I.A.2. The Sponsoring Institution must also sponsor ~~other relevant oncology-related graduate medical education programs accredited by the Accreditation Council for Graduate Medical Education (ACGME), including residencies or fellowships in surgical, medical, and/or pediatric oncology.~~at least one oncology-related fellowship program accredited by the ACGME in a surgical, medical, or pediatric subspecialty. (Core)

I.A.3. At least 50 percent of the residents' educational experiences should take place at the primary clinical site. (Core)

I.B. Participating Sites

I.B.1. There must be a program letter of agreement (PLA) between the program and each participating site providing a required assignment. The PLA must be renewed at least every five years. (Core)

The PLA should:

I.B.1.a) identify the faculty who will assume both educational and supervisory responsibilities for residents; (Detail)

I.B.1.b) specify their responsibilities for teaching, supervision, and formal evaluation of residents, as specified later in this document; (Detail)

I.B.1.c) specify the duration and content of the educational experience; and, (Detail)

I.B.1.d) state the policies and procedures that will govern resident education during the assignment. (Detail)

I.B.2. **The program director must submit any additions or deletions of participating sites routinely providing an educational experience, required for all residents, of one month full time equivalent (FTE) or more through the Accreditation Council for Graduate Medical Education (ACGME) Accreditation Data System (ADS).** (Core)

I.B.3. Assignment to a participating site must be based on a clear educational rationale, be integral to the program curriculum, ~~with~~ have clearly~~-~~ stated activities and objectives, and ~~should~~ provide resources not otherwise available to the program. (Core)

I.B.4. When multiple participating sites are used, there must be assurance of the continuity of the educational experience. (Core)

I.B.5. ~~Integrated~~ Participating sites

I.B.5.a) ~~A site is considered *integrated* when t~~The program director must determine~~s~~ all rotations and assignments of residents, and is responsible for the overall conduct of the educational program and faculty members ~~there~~at each participating site. (Core)

I.B.5.b) Clinical faculty members at ~~the~~ each ~~integrated~~ participating site should have faculty appointments from the Sponsoring Institution or the primary clinical site. (Detail)

I.B.5.c) ~~Integrated~~Participating sites must provide a means for direct participation in joint conferences, either in person~~by attendance~~ when institutions are in geographic proximity to the primary clinical site, or by electronic ~~transmission~~ means when not. (~~Detail~~Core)

I.B.5.d) Prior approval must be obtained from the Review Committee for ~~an integrated~~ the addition of a participating site, regardless of the duration of rotation(s). (Core)

I.B.5.d).(1) ~~Rotations to integrated sites are not limited in duration.~~ (~~Detail~~)

I.B.6. ~~Other Participating sites~~

~~Participating sites that do not meet the requirements for integrated sites must meet the following requirements:~~

I.B.6.a) ~~Participating sites that are not designated as integrated may be used to complement residents' educational experiences.~~

I.B.6.b) ~~Rotations which are outside the primary clinical site or integrated sites must not exceed a total of six months during the residency.~~ (~~Core~~)

I.B.6.c) ~~Participating sites do not require prior Review Committee approval. There must be a Program Letter of Agreement for any~~

~~site from which cases are entered into resident logs. (See Requirement I.B.1).~~ ~~(Detail)~~

II. Program Personnel and Resources

II.A. Program Director

II.A.1. There must be a single program director with authority and accountability for the operation of the program. The sponsoring institution's GMEC must approve a change in program director. (Core)

II.A.1.a) The program director must submit this change to the ACGME via the ADS. (Core)

II.A.1.b) The program director should be a full-time faculty member at the primary or at a participating clinical site. (Detail)

II.A.1.b).(1) If at a participating site, the program director should be readily available to residents as needed. (Detail)

II.A.2. The program director should continue in his or her position for a length of time adequate to maintain continuity of leadership and program stability. (Detail)

II.A.2.a) The program director should have an ~~term~~ appointment of at least three years. (Detail)

II.A.3. Qualifications of the program director must include:

II.A.3.a) requisite specialty expertise and documented educational and administrative experience acceptable to the Review Committee; (Core)

II.A.3.b) current certification in the specialty by the American Board of Radiology**, or specialty qualifications that are acceptable to the Review Committee; and,** (Core)

II.A.3.b).(1) The program director must actively participate in Maintenance of Certification in radiation oncology through the American Board of Radiology. (Core)

II.A.3.c) current medical licensure and appropriate medical staff appointment. (Core)

II.A.4. The program director must administer and maintain an educational environment conducive to educating the residents in each of the ACGME competency areas. (Core)

The program director must:

II.A.4.a) **oversee and ensure the quality of didactic and clinical education in all sites that participate in the program;** (Core)

II.A.4.b) **approve a local director at each participating site who is accountable for resident education;** (Core)

II.A.4.c) **approve the selection of program faculty as appropriate;** (Core)

II.A.4.d) **evaluate program faculty;** (Core)

II.A.4.e) **approve the continued participation of program faculty based on evaluation;** (Core)

II.A.4.f) **monitor resident supervision at all participating sites;** (Core)

II.A.4.g) **prepare and submit all information required and requested by the ACGME.** (Core)

II.A.4.g).(1) **This includes but is not limited to the program application forms and annual program updates to the ADS, and ensure that the information submitted is accurate and complete.** (Core)

II.A.4.h) **ensure compliance with grievance and due process procedures as set forth in the Institutional Requirements and implemented by the sponsoring institution;** (Detail)

II.A.4.i) **provide verification of residency education for all residents, including those who leave the program prior to completion;** (Detail)

II.A.4.j) **implement policies and procedures consistent with the institutional and program requirements for resident duty hours and the working environment, including moonlighting,** (Core)

and, to that end, must:

II.A.4.j).(1) **distribute these policies and procedures to the residents and faculty;** (Detail)

II.A.4.j).(2) **monitor resident duty hours, according to sponsoring institutional policies, with a frequency sufficient to ensure compliance with ACGME requirements;** (Core)

II.A.4.j).(3) **adjust schedules as necessary to mitigate excessive service demands and/or fatigue; and,** (Detail)

II.A.4.j).(4) **if applicable, monitor the demands of at-home call and adjust schedules as necessary to mitigate excessive service demands and/or fatigue.** (Detail)

II.A.4.k) **monitor the need for and ensure the provision of back up support systems when patient care responsibilities are unusually difficult or prolonged;** (Detail)

II.A.4.l) **comply with the sponsoring institution's written policies and procedures, including those specified in the Institutional Requirements, for selection, evaluation and promotion of residents, disciplinary action, and supervision of residents;** (Detail)

II.A.4.m) **be familiar with and comply with ACGME and Review Committee policies and procedures as outlined in the ACGME Manual of Policies and Procedures;** (Detail)

II.A.4.n) **obtain review and approval of the sponsoring institution's GMEC/DIO before submitting information or requests to the ACGME, including:** (Core)

II.A.4.n).(1) **all applications for ACGME accreditation of new programs;** (Detail)

II.A.4.n).(2) **changes in resident complement;** (Detail)

II.A.4.n).(3) **major changes in program structure or length of training;** (Detail)

II.A.4.n).(4) **progress reports requested by the Review Committee;** (Detail)

II.A.4.n).(5) **requests for increases or any change to resident duty hours;** (Detail)

II.A.4.n).(6) **voluntary withdrawals of ACGME-accredited programs;** (Detail)

II.A.4.n).(7) **requests for appeal of an adverse action; and,** (Detail)

II.A.4.n).(8) **appeal presentations to a Board of Appeal or the ACGME.** (Detail)

II.A.4.o) **obtain DIO review and co-signature on all program application forms, as well as any correspondence or document submitted to the ACGME that addresses:** (Detail)

II.A.4.o).(1) **program citations, and/or,** (Detail)

II.A.4.o).(2) **request for changes in the program that would have significant impact, including financial, on the program or institution.** (Detail)

II.A.4.p) ensure that each resident keeps a detailed, well-organized, and accurate electronic log of th~~ose~~ procedures ~~noted~~ specified in Program Requirement IV.A.6.; and, (Core)

II.A.4.p).(1) The log should include patients simulated, procedures performed, and modalities used. (Detail)

II.A.4.q) review the logs with ~~all~~ each residents at least semiannually to ensure accuracy and to verify that the case distribution meets the standards specified~~; and,~~. (Detail)

II.A.4.q).(1) The program director must provide documentation of these discussions for the resident's record maintained by the program~~; and,~~. (~~Detail~~Core)

II.A.4.r) ~~submit the cumulative experience of graduating residents to the Review Committee annually in accordance with the format and the due date specified by the Review Committee.~~ (Core)

II.B. Faculty

II.B.1. At each participating site, there must be a sufficient number of faculty with documented qualifications to instruct and supervise all residents at that location. (Core)

The faculty must:

II.B.1.a) devote sufficient time to the educational program to fulfill their supervisory and teaching responsibilities; and to demonstrate a strong interest in the education of residents; and, (Core)

II.B.1.b) administer and maintain an educational environment conducive to educating residents in each of the ACGME competency areas. (Core)

II.B.2. The physician faculty must have current certification in the specialty by the American Board of Radiology**, or possess qualifications judged acceptable to the Review Committee.** (Core)

II.B.3. The physician faculty must possess current medical licensure and appropriate medical staff appointment. (Core)

II.B.4. The non-physician faculty must have appropriate qualifications in their field and hold appropriate institutional appointments. (Core)

II.B.5. The faculty must establish and maintain an environment of inquiry and scholarship with an active research component. (Core)

II.B.5.a) The faculty must regularly participate in organized clinical discussions, rounds, journal clubs, and conferences. (Detail)

II.B.5.b) **Some members of the faculty should also demonstrate scholarship by one or more of the following:**

II.B.5.b).(1) **peer-reviewed funding;** (Detail)

II.B.5.b).(2) **publication of original research or review articles in peer-reviewed journals, or chapters in textbooks;** (Detail)

II.B.5.b).(3) **publication or presentation of case reports or clinical series at local, regional, or national professional and scientific society meetings; or,** (Detail)

II.B.5.b).(4) **participation in national committees or educational organizations.** (Detail)

II.B.5.c) **Faculty should encourage and support residents in scholarly activities.** (Core)

II.B.5.d) The majority of both physician and PhD faculty members should demonstrate scholarship as defined above. (Detail)

II.B.6. ~~The department chair must demonstrate an interest in and support for the training of residents in Radiation Oncology.~~ (Core)

II.B.7. The faculty must include a minimum of four FTE radiation oncologists, located at the primary clinical site, who devote the majority of their professional time to the education of residents. (Core)

II.B.8. To provide a scholarly environment of research and to participate in the teaching of radiation and cancer biology, t~~T~~he faculty must include at least one full-time radiation biologist or cancer biologist (PhD level or equivalent) who devotes the majority of his or her professional time to laboratory-based cancer research ~~and is at the primary clinical site or at an integrated site to provide a scholarly environment of research, and to participate in the teaching of radiation and cancer biology~~. (Core)

II.B.8.a) This individual must be based at the primary clinical site or at a participating site. (Core)

II.B.9. To provide a scholarly environment of research and to participate in the teaching of radiation physics, t~~T~~he ~~radiation oncology~~ faculty must include at least one full-time ~~faculty~~ medical physicist (PhD level or equivalent)~~,~~ ~~who is at the primary clinical site or an integrated site to provide a scholarly environment of research, and to participate in the teaching of radiation physics~~. (Core)

II.B.9.a) This individual must be based at the primary clinical site or at a participating site. (Core)

II.B.10. The faculty-to-resident ratio must be at least 0.67 FTE faculty members for every resident in the program. (Detail)

II.C. Other Program Personnel

The institution and the program must jointly ensure the availability of all necessary professional, technical, and clerical personnel for the effective administration of the program. (Core)

II.D. Resources

The institution and the program must jointly ensure the availability of adequate resources for resident education, as defined in the specialty program requirements. (Core)

II.D.1. There must be a minimum of 600 patients receiving external beam radiation therapy per year cumulatively at the primary clinical site and any ~~integrated~~ participating sites. (Core)

II.D.2. Facilities

II.D.2.a) At the primary clinical site there must be two or more megavoltage machines, a machine with a broad range of electron beam capabilities, computed tomography (CT)-simulation capability, and three-dimensional conformal computerized treatment planning, including intensity modulated radiation therapy (IMRT). (Core)

II.D.2.b) There must be ~~A~~adequate conference room and audiovisual facilities ~~must be provided~~. (~~Detail~~Core)

II.D.3. Other Services

II.D.3.a) Adequate medical services must be available in the specialties of medical oncology, surgical oncology, and pediatric oncology. (~~Detail~~Core)

II.D.3.b) There must be access to current imaging techniques, nuclear medicine, pathology, a clinical laboratory, and a tumor registry. (Core)

II.E. Medical Information Access

Residents must have ready access to specialty-specific and other appropriate reference material in print or electronic format. Electronic medical literature databases with search capabilities should be available. (Detail)

III. Resident Appointments

III.A. Eligibility Criteria

The program director must comply with the criteria for resident eligibility as specified in the Institutional Requirements. (Core)

III.A.1. Eligibility Requirements – Residency Programs

III.A.1.a) All prerequisite post-graduate clinical education required for initial entry or transfer into ACGME-accredited residency programs must be completed in ACGME-accredited residency programs, or in Royal College of Physicians and Surgeons of Canada (RCPSC)-accredited or College of Family Physicians of Canada (CFPC)-accredited residency programs located in Canada. Residency programs must receive verification of each applicant's level of competency in the required clinical field using ACGME or CanMEDS Milestones assessments from the prior training program. (Core)

III.A.1.a).(1) Prior to entering the program, residents must have completed 12 months of post-graduate clinical education in a residency program accredited by the ACGME or one located in Canada and accredited by the RCPSC which must include:

III.A.1.a).(1).(a) a minimum of nine months of direct patient care in family medicine, internal medicine, obstetrics and gynecology, pediatrics, or surgery or surgical specialties, or in a transitional year program; and, (Core)

III.A.1.a).(1).(b) a maximum of three months in radiation oncology. (Core)

III.A.1.b) A physician who has completed a residency program that was not accredited by ACGME, RCPSC, or CFPC may enter an ACGME-accredited residency program in the same specialty at the PGY-1 level and, at the discretion of the program director at the ACGME-accredited program may be advanced to the PGY-2 level based on ACGME Milestones assessments at the ACGME-accredited program. This provision applies only to entry into residency in those specialties for which an initial clinical year is not required for entry. (Core)

III.A.1.c) A Review Committee may grant the exception to the eligibility requirements specified in Section III.A.2.b) for residency programs that require completion of a prerequisite residency program prior to admission. (Core)

III.A.1.d) Review Committees will grant no other exceptions to these eligibility requirements for residency education. (Core)

III.A.2. Eligibility Requirements – Fellowship Programs

All required clinical education for entry into ACGME-accredited fellowship programs must be completed in an ACGME-accredited residency program, or in an RCPSC-accredited or CFPC- accredited residency program located in Canada. (Core)

III.A.2.a) **Fellowship programs must receive verification of each entering fellow's level of competency in the required field using ACGME or CanMEDS Milestones assessments from the core residency program.** (Core)

III.A.2.b) **Fellow Eligibility Exception**

A Review Committee may grant the following exception to the fellowship eligibility requirements:

An ACGME-accredited fellowship program may accept an exceptionally qualified applicant, who does not satisfy the eligibility requirements listed in Sections III.A.2. and III.A.2.a), but who does meet all of the following additional qualifications and conditions:** (Core)

III.A.2.b).(1) **Assessment by the program director and fellowship selection committee of the applicant's suitability to enter the program, based on prior training and review of the summative evaluations of training in the core specialty; and** (Core)

III.A.2.b).(2) **Review and approval of the applicant's exceptional qualifications by the GMEC or a subcommittee of the GMEC; and** (Core)

III.A.2.b).(3) **Satisfactory completion of the United States Medical Licensing Examination (USMLE) Steps 1, 2, and, if the applicant is eligible, 3, and;** (Core)

III.A.2.b).(4) **For an international graduate, verification of Educational Commission for Foreign Medical Graduates (ECFMG) certification; and,** (Core)

III.A.2.b).(5) **Applicants accepted by this exception must complete fellowship Milestones evaluation (for the purposes of establishment of baseline performance by the Clinical Competency Committee), conducted by the receiving fellowship program within six weeks of matriculation. This evaluation may be waived for an applicant who has completed an ACGME International-accredited residency based on the applicant's Milestones evaluation conducted at the conclusion of the residency program.** (Core)

III.A.2.b).(5).(a) **If the trainee does not meet the expected level of Milestones competency following entry into the fellowship program, the trainee must undergo a period of remediation, overseen by the Clinical Competency Committee and monitored by the GMEC or a subcommittee of the GMEC. This period of remediation must not count toward time in fellowship training.** (Core)

**** An exceptionally qualified applicant has (1) completed a non-ACGME-accredited residency program in the core specialty, and (2) demonstrated clinical excellence, in comparison to peers, throughout training. Additional evidence of exceptional qualifications is required, which may include one of the following: (a) participation in additional clinical or research training in the specialty or subspecialty; (b) demonstrated scholarship in the specialty or subspecialty; (c) demonstrated leadership during or after residency training; (d) completion of an ACGME-International-accredited residency program.**

III.B. Number of Residents

The program's educational resources must be adequate to support the number of residents appointed to the program. (Core)

III.B.1. **The program director may not appoint more residents than approved by the Review Committee, unless otherwise stated in the specialty-specific requirements.** (Core)

III.B.1.a) ~~Prior approval must be obtained from the Review Committee to increase the number of resident positions.~~ (Core)

III.B.2. ~~Each program must be structured to have a minimum of four residents~~The program must offer at least four resident positions. (Core)

III.C. Resident Transfers

III.C.1. **Before accepting a resident who is transferring from another program, the program director must obtain written or electronic verification of previous educational experiences and a summative competency-based performance evaluation of the transferring resident.** (Detail)

III.C.2. **A program director must provide timely verification of residency education and summative performance evaluations for residents who may leave the program prior to completion.** (Detail)

III.D. Appointment of Fellows and Other Learners

The presence of other learners (including, but not limited to, residents from other specialties, subspecialty fellows, PhD students, and nurse practitioners) in the program must not interfere with the appointed residents' education. (Core)

III.D.1. **The program director must report the presence of other learners to the DIO and GMEC in accordance with sponsoring institution guidelines.** (Detail)

IV. Educational Program

IV.A. **The curriculum must contain the following educational components:**

IV.A.1. **Overall educational goals for the program, which the program must make available to residents and faculty;** (Core)

IV.A.2. **Competency-based goals and objectives for each assignment at each educational level, which the program must distribute to residents and faculty at least annually, in either written or electronic form;** (Core)

IV.A.3. **Regularly scheduled didactic sessions;** (Core)

IV.A.3.a) Didactic sessions should be attended by residents, radiation oncologists, and other staff members. (Detail)

IV.A.3.b) The program must ~~document that residents acquire knowledge and skills through~~ provide instruction in the following areas:

IV.A.3.b).(1) three-dimensional conformal radiation therapy~~,~~; (Core)

IV.A.3.b).(2) intensity-modulated radiation therapy~~,~~; (Core)

IV.A.3.b).(3) image-guided radiation therapy~~,~~; (Core)

IV.A.3.b).(4) stereotactic radiosurgery~~,~~; (Core)

IV.A.3.b).(5) stereotactic body radiotherapy~~,~~; (Core)

IV.A.3.b).(6) concurrent chemo-radiotherapy~~,~~; (Core)

IV.A.3.b).(7) intra-operative radiation therapy~~,~~; (Core)

IV.A.3.b).(8) radioimmunotherapy~~,~~; (Core)

IV.A.3.b).(9) unsealed sources~~,~~; (Core)

IV.A.3.b).(10) total body irradiation therapy as used in stem-cell transplantation~~,~~; (Core)

IV.A.3.b).(11) total skin radiation therapy; (Core)

IV.A.3.b).(12) high- and low-dose rate brachytherapy~~,~~; and, (Core)

IV.A.3.b).(13) particle therapy. (Core)

IV.A.3.c) The program must provide instruction in medical physics that includes practical demonstrations of radiation safety procedures, calibration of radiation therapy machines, the use of state-of-the-art treatment planning systems, the application of treatment aids, and the safe handling of sealed and unsealed radionuclides. (Core)

IV.A.3.d) The program must provide instruction in radiation and cancer biology that includes the molecular effects of ionizing radiation and radiation effects on normal and neoplastic tissues, as well as the fundamental biology of the causes, prevention, and treatment of cancer. (Core)

IV.A.3.e) The program must ensure that there are intradepartmental clinical oncology conferences that ~~cover~~ address the following topics: new patient management, patient safety, and continuous quality improvement. (Core)

IV.A.4. Delineation of resident responsibilities for patient care, progressive responsibility for patient management, and supervision of residents over the continuum of the program; and, (Core)

IV.A.5. ACGME Competencies

The program must integrate the following ACGME competencies into the curriculum: (Core)

IV.A.5.a) Patient Care and Procedural Skills

IV.A.5.a).(1) Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. (Outcome)

IV.A.5.a).(2) Residents must be able to competently perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. Residents: (Outcome)

must demonstrate competence in:

IV.A.5.a).(2).(a) ~~must demonstrate competence in~~ follow-up care of irradiated patients, including pediatric patients; ~~and,~~ (Outcome)

IV.A.5.a).(2).(b) ~~must demonstrate competence in~~ performing interstitial and intracavitary brachytherapy procedures; (Outcome)

IV.A.5.a).(2).(c) ~~must demonstrate competence in~~ the use of unsealed radioactive sources; (Outcome)

IV.A.5.a).(2).(d) ~~must demonstrate competence in~~ treating adult patients with conventionally-fractionated external beam radiation therapy; (Outcome)

IV.A.5.a).(2).(e) ~~must demonstrate competence in~~ treating adult patients with stereotactic radiosurgery and stereotactic body radiation therapy; and,~~.~~ (Outcome)

IV.A.5.a).(2).(f) ~~must demonstrate competence in~~ treating pediatric patients, including patients with solid tumors.~~;~~ (Outcome)

IV.A.5.b) Medical Knowledge

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care. Residents: (Outcome)

must demonstrate competence in their knowledge of:

IV.A.5.b).(1) clinical radiation oncology, including late effects on normal tissue; (Outcome)

IV.A.5.b).(2) clinical radiation physics; (Outcome)

IV.A.5.b).(3) medical statistics; (Outcome)

IV.A.5.b).(4) radiation and cancer biology; and, (Outcome)

IV.A.5.b).(5) radiation safety procedures. (Outcome)

IV.A.5.c) Practice-based Learning and Improvement

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. (Outcome)

Residents are expected to develop skills and habits to be able to meet the following goals:

IV.A.5.c).(1) **identify strengths, deficiencies, and limits in one's knowledge and expertise;** (Outcome)

IV.A.5.c).(2) **set learning and improvement goals;** (Outcome)

IV.A.5.c).(3) **identify and perform appropriate learning activities;** (Outcome)

IV.A.5.c).(4) **systematically analyze practice using quality improvement methods, and implement changes with the goal of practice improvement;** (Outcome)

IV.A.5.c).(5) **incorporate formative evaluation feedback into daily practice;** (Outcome)

IV.A.5.c).(6) **locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems;** (Outcome)

IV.A.5.c).(7) **use information technology to optimize learning; and,** (Outcome)

IV.A.5.c).(8) **participate in the education of patients, families, students, residents and other health professionals.** (Outcome)

IV.A.5.d) **Interpersonal and Communication Skills**

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals. (Outcome)

Residents are expected to:

IV.A.5.d).(1) **communicate effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds;** (Outcome)

IV.A.5.d).(2) **communicate effectively with physicians, other health professionals, and health related agencies;** (Outcome)

IV.A.5.d).(3) **work effectively as a member or leader of a health care team or other professional group;** (Outcome)

IV.A.5.d).(4) **act in a consultative role to other physicians and health professionals; and,** (Outcome)

IV.A.5.d).(5) **maintain comprehensive, timely, and legible medical records, if applicable.** (Outcome)

IV.A.5.e) **Professionalism**

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. (Outcome)

Residents are expected to demonstrate:

IV.A.5.e).(1) **compassion, integrity, and respect for others;** (Outcome)

IV.A.5.e).(2) **responsiveness to patient needs that supersedes self-interest;** (Outcome)

IV.A.5.e).(3) **respect for patient privacy and autonomy;** (Outcome)

IV.A.5.e).(4) **accountability to patients, society and the profession; and,** (Outcome)

IV.A.5.e).(5) **sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation.** (Outcome)

IV.A.5.f) **Systems-based Practice**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care. (Outcome)

Residents are expected to:

IV.A.5.f).(1) **work effectively in various health care delivery settings and systems relevant to their clinical specialty;** (Outcome)

IV.A.5.f).(2) **coordinate patient care within the health care system relevant to their clinical specialty;** (Outcome)

IV.A.5.f).(3) **incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate;** (Outcome)

IV.A.5.f).(4) **advocate for quality patient care and optimal patient care systems;** (Outcome)

IV.A.5.f).(5) **work in interprofessional teams to enhance patient safety and improve patient care quality; and,** (Outcome)

IV.A.5.f).(6) **participate in identifying system errors and implementing potential systems solutions.** (Outcome)

IV.A.6. Curriculum Organization and Resident Experiences

IV.A.6.a) ~~The first year of post-graduate clinical education must be spent in internal medicine, family medicine, obstetrics and gynecology, surgery or surgical specialties, pediatrics, or a transitional year program, and must include at least nine months of direct patient care in medical and/or surgical specialties other than radiation oncology.~~ (Core)

IV.A.6.b) The ~~year of clinical education must be followed by forty-eight~~curriculum must include 48 months ~~in an ACGME accredited~~of education in radiation oncology~~program~~. (Core)

IV.A.6.b).(1) ~~No fewer than~~ This must include a minimum of 36 months ~~must be spent~~ in clinical radiation oncology. (Core)

IV.A.6.b).(2) The remaining 12 months may be spent performing such activities as taking elective rotations, performing research, pursuing an advanced degree, or taking other clinical rotations. (Core)

IV.A.6.b).(2).(a) This time must not be used to pursue a fellowship. (Core)

IV.A.6.b).(2).(b) Previous time spent in another ACGME-accredited program must not be applied to reduce the required length of the residency in radiation oncology.(Core)

IV.A.6.b).(3) The American Board of Radiology's Holman Pathway residents must complete no fewer than 27 months of clinical radiation oncology. (~~Detail~~Core)

IV.A.6.c) Residents must have experience with lymphomas and leukemias; breast, central nervous system , gastrointestinal, genitourinary, gynecologic, head and neck, lung, pediatric, skin, and soft tissue and bone tumors; and treatment of benign diseases for which radiation is utilized. (Core)

IV.A.6.d) Each resident must treat at least 450 patients with external beam radiation therapy. (Core)

IV.A.6.d).(1) ~~Holman Pathway residents must treat 350 patients.~~ (~~Detail~~Core)

IV.A.6.d).(2) ~~A resident should treat no more than 250 patients with external beam radiation therapy in any one year.~~ (~~Detail~~) A resident should treat no more than 250 patients with external beam radiation therapy in any one year. (Detail)

IV.A.6.e) Each resident must perform at least five interstitial and 15 intracavitary brachytherapy procedures. (Core)

IV.A.6.f) Each resident must treat at least 12 pediatric patients, including at least nine patients with solid tumors. (Core)

IV.A.6.g) Each resident must demonstrate the requisite skills in ~~successfully~~ treating at least 20 patients with intracranial stereotactic radiosurgery and at least ~~10~~ 20 patients with stereotactic body radiation therapy to the liver, lung, spine, or other extracranial sites. (Core)

IV.A.6.h) Each resident must demonstrate the requisite knowledge and skills in the administration of at least six procedures using radioimmunotherapy, other targeted therapeutic radiopharmaceuticals, or unsealed sources. (Core)

Of the six procedures:

IV.A.6.h).(1) Oral ~~1~~I-131 ≥ 33 mCi: A minimum of three procedures must include the oral administration of I-131 with administered activity equal to or in excess of 1.22 Gigabecquerels (33 mCi). Patient c~~C~~onditions may be either benign or malignant but the counted administration must be for therapeutic intent. (Core)

IV.A.6.h).(2) Parenteral unsealed source: A minimum of three procedures must include a parenteral administration with therapeutic intent for a diagnosis of malignancy. (Core)

IV.A.6.i) The program must ~~educate resident physicians~~ include education in adult medical oncology, pediatric medical oncology, oncologic pathology, ~~and~~ oncologic diagnostic imaging, and palliative care in a way that is applicable to the practice of radiation oncology. (Core)

IV.A.6.i).(1) ~~There are multiple ways~~In order to meet this requirement, programs should:

IV.A.6.i).(1).(a) document resident attendance at regularly-scheduled multidisciplinary patient disposition conferences (at least four hours per month during the clinical rotations); or, (Detail)

IV.A.6.i).(1).(b) Provide a two-month rotation in medical oncology, to include adult and pediatric patients, as well as a one-month rotation in both oncologic pathology and diagnostic imaging~~, or.~~ (Detail~~Core~~)

IV.A.6.i).(1).(c) ~~Document attendance at regularly-scheduled multidisciplinary patient disposition conferences (at~~

~~least four hours per month during the clinical rotations).~~ ~~(Detail)~~

IV.A.6.i).(2) ~~To satisfy the requirement for education in one of these areas, it must be documented that a board certified physician in the applicable field participated in the conference~~Each conference must include the documented participation of a physician board-certified in the applicable specialty or subspecialty. (~~Detail~~Core)

IV.B. Residents' Scholarly Activities

IV.B.1. The curriculum must advance residents' knowledge of the basic principles of research, including how research is conducted, evaluated, explained to patients, and applied to patient care. (Core)

IV.B.2. Residents should participate in scholarly activity. (Core)

IV.B.2.a) Residents must complete an investigative project under faculty member supervision. (Core)

IV.B.2.a).(1) Projects should take the form of biological laboratory research, clinical research, translational research, medical physics research, or other research approved by the program director. (Detail)

IV.B.2.a).(2) The results of such projects should be suitable for publication in peer-reviewed scholarly journals or presentation at scientific meetings. (Detail)

IV.B.3. The sponsoring institution and program should allocate adequate educational resources to facilitate resident involvement in scholarly activities. (Detail)

V. Evaluation

V.A. Resident Evaluation

V.A.1. The program director must appoint the Clinical Competency Committee. **(Core)**

V.A.1.a) At a minimum the Clinical Competency Committee must be composed of three members of the program faculty. **(Core)**

V.A.1.a).(1) The program director may appoint additional members of the Clinical Competency Committee.

V.A.1.a).(1).(a) These additional members must be physician faculty members from the same program or other programs, or other health professionals who have extensive contact and experience

with the program's residents in patient care and other health care settings. (Core)

V.A.1.a).(1).(b) **Chief residents who have completed core residency programs in their specialty and are eligible for specialty board certification may be members of the Clinical Competency Committee.** (Core)

V.A.1.b) **There must be a written description of the responsibilities of the Clinical Competency Committee.** (Core)

V.A.1.b).(1) **The Clinical Competency Committee should:**

V.A.1.b).(1).(a) **review all resident evaluations semi-annually;** (Core)

V.A.1.b).(1).(b) **prepare and ensure the reporting of Milestones evaluations of each resident semi-annually to ACGME; and,** (Core)

V.A.1.b).(1).(c) **advise the program director regarding resident progress, including promotion, remediation, and dismissal.** (Detail)

V.A.2. **Formative Evaluation**

V.A.2.a) **The faculty must evaluate resident performance in a timely manner during each rotation or similar educational assignment, and document this evaluation at completion of the assignment.** (Core)

V.A.2.b) **The program must:**

V.A.2.b).(1) **provide objective assessments of competence in patient care and procedural skills, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems-based practice based on the specialty-specific Milestones;** (Core)

V.A.2.b).(2) **use multiple evaluators (e.g., faculty, peers, patients, self, and other professional staff);** (Detail)

V.A.2.b).(3) **document progressive resident performance improvement appropriate to educational level; and,** (Core)

V.A.2.b).(4) **provide each resident with documented semiannual evaluation of performance with feedback.** (Core)

V.A.2.c) The evaluations of resident performance must be accessible for review by the resident, in accordance with institutional policy. (Detail)

V.A.3. Summative Evaluation

V.A.3.a) The specialty-specific Milestones must be used as one of the tools to ensure residents are able to practice core professional activities without supervision upon completion of the program. (Core)

V.A.3.b) The program director must provide a summative evaluation for each resident upon completion of the program. (Core)

This evaluation must:

V.A.3.b).(1) become part of the resident's permanent record maintained by the institution, and must be accessible for review by the resident in accordance with institutional policy; (Detail)

V.A.3.b).(2) document the resident's performance during the final period of education; and, (Detail)

V.A.3.b).(3) verify that the resident has demonstrated sufficient competence to enter practice without direct supervision. (Detail)

V.B. Faculty Evaluation

V.B.1. At least annually, the program must evaluate faculty performance as it relates to the educational program. (Core)

V.B.2. These evaluations should include a review of the faculty's clinical teaching abilities, commitment to the educational program, clinical knowledge, professionalism, and scholarly activities. (Detail)

V.B.3. This evaluation must include at least annual written confidential evaluations by the residents. (Detail)

V.C. Program Evaluation and Improvement

V.C.1. The program director must appoint the Program Evaluation Committee (PEC). **(Core)**

V.C.1.a) The Program Evaluation Committee:

V.C.1.a).(1) must be composed of at least two program faculty members and should include at least one resident; **(Core)**

V.C.1.a).(2) must have a written description of its responsibilities; and, (Core)

V.C.1.a).(3) should participate actively in:

V.C.1.a).(3).(a) planning, developing, implementing, and evaluating educational activities of the program; (Detail)

V.C.1.a).(3).(b) reviewing and making recommendations for revision of competency-based curriculum goals and objectives; (Detail)

V.C.1.a).(3).(c) addressing areas of non-compliance with ACGME standards; and, (Detail)

V.C.1.a).(3).(d) reviewing the program annually using evaluations of faculty, residents, and others, as specified below. (Detail)

V.C.2. The program, through the PEC, must document formal, systematic evaluation of the curriculum at least annually, and is responsible for rendering a written, annual program evaluation. (Core)

The program must monitor and track each of the following areas:

V.C.2.a) resident performance; (Core)

V.C.2.b) faculty development; (Core)

V.C.2.c) graduate performance, including performance of program graduates on the certification examination; (Core)

V.C.2.c).(1) Sixty percent of ~~the~~ a program's graduates from the preceding five years taking the American Board of Radiology qualifying (written) examination for the first time must pass. (Outcome)

V.C.2.c).(2) Sixty percent of a program's graduates from the preceding five years taking the American Board of Radiology certifying (oral) examination for the first time must pass. (Outcome)

V.C.2.d) program quality; and, (Core)

V.C.2.d).(1) Residents and faculty must have the opportunity to evaluate the program confidentially and in writing at least annually, and (Detail)

V.C.2.d).(2) The program must use the results of residents' and faculty members' assessments of the program

together with other program evaluation results to improve the program. (Detail)

V.C.2.e) **progress on the previous year's action plan(s).** (Core)

V.C.3. **The PEC must prepare a written plan of action to document initiatives to improve performance in one or more of the areas listed in section V.C.2., as well as delineate how they will be measured and monitored.** (Core)

V.C.3.a) **The action plan should be reviewed and approved by the teaching faculty and documented in meeting minutes.** (Detail)

VI. The Learning and Working Environment

Residency education must occur in the context of a learning and working environment that emphasizes the following principles:

- ***Excellence in the safety and quality of care rendered to patients by residents today***
- ***Excellence in the safety and quality of care rendered to patients by today's residents in their future practice***
- ***Excellence in professionalism through faculty modeling of:***
  - ***the effacement of self-interest in a humanistic environment that supports the professional development of physicians***
  - ***the joy of curiosity, problem-solving, intellectual rigor, and discovery***
- ***Commitment to the well-being of the students, residents, faculty members, and all members of the health care team***

VI.A. Patient Safety, Quality Improvement, Supervision, and Accountability

VI.A.1. Patient Safety and Quality Improvement

All physicians share responsibility for promoting patient safety and enhancing quality of patient care. Graduate medical education must prepare residents to provide the highest level of clinical care with continuous focus on the safety, individual needs, and humanity of their patients. It is the right of each patient to be cared for by residents who are appropriately supervised; possess the requisite knowledge, skills, and abilities; understand the limits of their knowledge and experience; and seek assistance as required to provide optimal patient care.

Residents must demonstrate the ability to analyze the care they provide, understand their roles within health care teams, and play an

active role in system improvement processes. Graduating residents will apply these skills to critique their future unsupervised practice and effect quality improvement measures.

It is necessary for residents and faculty members to consistently work in a well-coordinated manner with other health care professionals to achieve organizational patient safety goals.

VI.A.1.a) Patient Safety

VI.A.1.a).(1) Culture of Safety

A culture of safety requires continuous identification of vulnerabilities and a willingness to transparently deal with them. An effective organization has formal mechanisms to assess the knowledge, skills, and attitudes of its personnel toward safety in order to identify areas for improvement.

VI.A.1.a).(1).(a) The program, its faculty, residents, and fellows must actively participate in patient safety systems and contribute to a culture of safety. (Core)

VI.A.1.a).(1).(b) The program must have a structure that promotes safe, interprofessional, team-based care. (Core)

VI.A.1.a).(2) Education on Patient Safety

Programs must provide formal educational activities that promote patient safety-related goals, tools, and techniques. (Core)

VI.A.1.a).(3) Patient Safety Events

Reporting, investigation, and follow-up of adverse events, near misses, and unsafe conditions are pivotal mechanisms for improving patient safety, and are essential for the success of any patient safety program. Feedback and experiential learning are essential to developing true competence in the ability to identify causes and institute sustainable systems-based changes to ameliorate patient safety vulnerabilities.

VI.A.1.a).(3).(a) Residents, fellows, faculty members, and other clinical staff members must:

VI.A.1.a).(3).(a).(i) know their responsibilities in reporting patient safety events at the clinical site; (Core)

VI.A.1.a).(3).(a).(ii) know how to report patient safety events, including near misses, at the clinical site; and, (Core)

VI.A.1.a).(3).(a).(iii) be provided with summary information of their institution's patient safety reports. (Core)

VI.A.1.a).(3).(b) Residents must participate as team members in real and/or simulated interprofessional clinical patient safety activities, such as root cause analyses or other activities that include analysis, as well as formulation and implementation of actions. (Core)

VI.A.1.a).(4) **Resident Education and Experience in Disclosure of Adverse Events**

Patient-centered care requires patients, and when appropriate families, to be apprised of clinical situations that affect them, including adverse events. This is an important skill for faculty physicians to model, and for residents to develop and apply.

VI.A.1.a).(4).(a) All residents must receive training in how to disclose adverse events to patients and families. (Core)

VI.A.1.a).(4).(b) Residents should have the opportunity to participate in the disclosure of patient safety events, real or simulated. (Detail)

VI.A.1.b) **Quality Improvement**

VI.A.1.b).(1) **Education in Quality Improvement**

A cohesive model of health care includes quality-related goals, tools, and techniques that are necessary in order for health care professionals to achieve quality improvement goals.

VI.A.1.b).(1).(a) Residents must receive training and experience in quality improvement processes, including an understanding of health care disparities. (Core)

VI.A.1.b).(2) **Quality Metrics**

Access to data is essential to prioritizing activities for care improvement and evaluating success of improvement efforts.

VI.A.1.b).(2).(a) **Residents and faculty members must receive data on quality metrics and benchmarks related to their patient populations.** (Core)

VI.A.1.b).(3) **Engagement in Quality Improvement Activities**

Experiential learning is essential to developing the ability to identify and institute sustainable systems-based changes to improve patient care.

VI.A.1.b).(3).(a) **Residents must have the opportunity to participate in interprofessional quality improvement activities.** (Core)

VI.A.1.b).(3).(a).(i) **This should include activities aimed at reducing health care disparities.** (Detail)

VI.A.2. **Supervision and Accountability**

VI.A.2.a) ***Although the attending physician is ultimately responsible for the care of the patient, every physician shares in the responsibility and accountability for their efforts in the provision of care. Effective programs, in partnership with their Sponsoring Institutions, define, widely communicate, and monitor a structured chain of responsibility and accountability as it relates to the supervision of all patient care.***

Supervision in the setting of graduate medical education provides safe and effective care to patients; ensures each resident's development of the skills, knowledge, and attitudes required to enter the unsupervised practice of medicine; and establishes a foundation for continued professional growth.

VI.A.2.a).(1) **Each patient must have an identifiable and appropriately-credentialed and privileged attending physician (or licensed independent practitioner as specified by the applicable Review Committee) who is responsible and accountable for the patient's care.** (Core)

VI.A.2.a).(1).(a) **This information must be available to residents, faculty members, other members of the health care team, and patients.** (Core)

VI.A.2.a).(1).(b) **Residents and faculty members must inform each patient of their respective roles in that**

patient's care when providing direct patient care. (Core)

VI.A.2.b) ***Supervision may be exercised through a variety of methods. For many aspects of patient care, the supervising physician may be a more advanced resident or fellow. Other portions of care provided by the resident can be adequately supervised by the immediate availability of the supervising faculty member, fellow, or senior resident physician, either on site or by means of telephonic and/or electronic modalities. Some activities require the physical presence of the supervising faculty member. In some circumstances, supervision may include post-hoc review of resident-delivered care with feedback.***

VI.A.2.b).(1) **The program must demonstrate that the appropriate level of supervision in place for all residents is based on each resident's level of training and ability, as well as patient complexity and acuity. Supervision may be exercised through a variety of methods, as appropriate to the situation.** (Core)

VI.A.2.c) **Levels of Supervision**

To promote oversight of resident supervision while providing for graded authority and responsibility, the program must use the following classification of supervision: (Core)

VI.A.2.c).(1) **Direct Supervision – the supervising physician is physically present with the resident and patient.** (Core)

VI.A.2.c).(2) **Indirect Supervision:**

VI.A.2.c).(2).(a) **with Direct Supervision immediately available – the supervising physician is physically within the hospital or other site of patient care, and is immediately available to provide Direct Supervision.** (Core)

VI.A.2.c).(2).(b) **with Direct Supervision available – the supervising physician is not physically present within the hospital or other site of patient care, but is immediately available by means of telephonic and/or electronic modalities, and is available to provide Direct Supervision.** (Core)

VI.A.2.c).(3) **Oversight – the supervising physician is available to provide review of procedures/encounters with feedback provided after care is delivered.** (Core)

VI.A.2.d) The privilege of progressive authority and responsibility, conditional independence, and a supervisory role in patient care delegated to each resident must be assigned by the program director and faculty members. (Core)

VI.A.2.d).(1) The program director must evaluate each resident's abilities based on specific criteria, guided by the Milestones. (Core)

VI.A.2.d).(2) Faculty members functioning as supervising physicians must delegate portions of care to residents based on the needs of the patient and the skills of each resident. (Core)

VI.A.2.d).(3) Senior residents or fellows should serve in a supervisory role to junior residents in recognition of their progress toward independence, based on the needs of each patient and the skills of the individual resident or fellow. (Detail)

VI.A.2.e) Programs must set guidelines for circumstances and events in which residents must communicate with the supervising faculty member(s). (Core)

VI.A.2.e).(1) Each resident must know the limits of their scope of authority, and the circumstances under which the resident is permitted to act with conditional independence. (Outcome)

VI.A.2.e).(1).(a) Initially, PGY-1 residents must be supervised either directly, or indirectly with direct supervision immediately available. (Core)

VI.A.2.f) Faculty supervision assignments must be of sufficient duration to assess the knowledge and skills of each resident and to delegate to the resident the appropriate level of patient care authority and responsibility. (Core)

VI.B. Professionalism

VI.B.1. Programs, in partnership with their Sponsoring Institutions, must educate residents and faculty members concerning the professional responsibilities of physicians, including their obligation to be appropriately rested and fit to provide the care required by their patients. (Core)

VI.B.2. The learning objectives of the program must:

VI.B.2.a) be accomplished through an appropriate blend of supervised patient care responsibilities, clinical teaching, and didactic educational events; (Core)

VI.B.2.b) be accomplished without excessive reliance on residents to fulfill non-physician obligations; and, (Core)

VI.B.2.c) ensure manageable patient care responsibilities. (Core)

VI.B.3. The program director, in partnership with the Sponsoring Institution, must provide a culture of professionalism that supports patient safety and personal responsibility. (Core)

VI.B.4. Residents and faculty members must demonstrate an understanding of their personal role in the:

VI.B.4.a) provision of patient- and family-centered care; (Outcome)

VI.B.4.b) safety and welfare of patients entrusted to their care, including the ability to report unsafe conditions and adverse events; (Outcome)

VI.B.4.c) assurance of their fitness for work, including: (Outcome)

VI.B.4.c).(1) management of their time before, during, and after clinical assignments; and, (Outcome)

VI.B.4.c).(2) recognition of impairment, including from illness, fatigue, and substance use, in themselves, their peers, and other members of the health care team. (Outcome)

VI.B.4.d) commitment to lifelong learning; (Outcome)

VI.B.4.e) monitoring of their patient care performance improvement indicators; and, (Outcome)

VI.B.4.f) accurate reporting of clinical and educational work hours, patient outcomes, and clinical experience data. (Outcome)

VI.B.5. All residents and faculty members must demonstrate responsiveness to patient needs that supersedes self-interest. This includes the recognition that under certain circumstances, the best interests of the patient may be served by transitioning that patient's care to another qualified and rested provider. (Outcome)

VI.B.6. Programs must provide a professional, respectful, and civil environment that is free from mistreatment, abuse, or coercion of students, residents, faculty, and staff. Programs, in partnership with their Sponsoring Institutions, should have a process for education of residents and faculty regarding unprofessional behavior and a confidential process for reporting, investigating, and addressing such concerns. (Core)

VI.C. Well-Being

In the current health care environment, residents and faculty members are at increased risk for burnout and depression. Psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician. Self-care is an important component of professionalism; it is also a skill that must be learned and nurtured in the context of other aspects of residency training. Programs, in partnership with their Sponsoring Institutions, have the same responsibility to address well-being as they do to evaluate other aspects of resident competence.

VI.C.1. **This responsibility must include:**

VI.C.1.a) **efforts to enhance the meaning that each resident finds in the experience of being a physician, including protecting time with patients, minimizing non-physician obligations, providing administrative support, promoting progressive autonomy and flexibility, and enhancing professional relationships; (Core)**

VI.C.1.b) **attention to scheduling, work intensity, and work compression that impacts resident well-being; (Core)**

VI.C.1.c) **evaluating workplace safety data and addressing the safety of residents and faculty members; (Core)**

VI.C.1.d) **policies and programs that encourage optimal resident and faculty member well-being; and, (Core)**

VI.C.1.d).(1) **Residents must be given the opportunity to attend medical, mental health, and dental care appointments, including those scheduled during their working hours. (Core)**

VI.C.1.e) **attention to resident and faculty member burnout, depression, and substance abuse. The program, in partnership with its Sponsoring Institution, must educate faculty members and residents in identification of the symptoms of burnout, depression, and substance abuse, including means to assist those who experience these conditions. Residents and faculty members must also be educated to recognize those symptoms in themselves and how to seek appropriate care. The program, in partnership with its Sponsoring Institution, must: (Core)**

VI.C.1.e).(1) **encourage residents and faculty members to alert the program director or other designated personnel or programs when they are concerned that another resident, fellow, or faculty member may be displaying signs of burnout, depression, substance abuse, suicidal ideation, or potential for violence; (Core)**

VI.C.1.e).(2) provide access to appropriate tools for self-screening; and, (Core)

VI.C.1.e).(3) provide access to confidential, affordable mental health assessment, counseling, and treatment, including access to urgent and emergent care 24 hours a day, seven days a week. (Core)

VI.C.2. There are circumstances in which residents may be unable to attend work, including but not limited to fatigue, illness, and family emergencies. Each program must have policies and procedures in place that ensure coverage of patient care in the event that a resident may be unable to perform their patient care responsibilities. These policies must be implemented without fear of negative consequences for the resident who is unable to provide the clinical work. (Core)

VI.D. Fatigue Mitigation

VI.D.1. Programs must:

VI.D.1.a) educate all faculty members and residents to recognize the signs of fatigue and sleep deprivation; (Core)

VI.D.1.b) educate all faculty members and residents in alertness management and fatigue mitigation processes; and, (Core)

VI.D.1.c) encourage residents to use fatigue mitigation processes to manage the potential negative effects of fatigue on patient care and learning. (Detail)

VI.D.2. Each program must ensure continuity of patient care, consistent with the program's policies and procedures referenced in VI.C.2, in the event that a resident may be unable to perform their patient care responsibilities due to excessive fatigue. (Core)

VI.D.3. The program, in partnership with its Sponsoring Institution, must ensure adequate sleep facilities and safe transportation options for residents who may be too fatigued to safely return home. (Core)

VI.E. Clinical Responsibilities, Teamwork, and Transitions of Care

VI.E.1. Clinical Responsibilities

The clinical responsibilities for each resident must be based on PGY level, patient safety, resident ability, severity and complexity of patient illness/condition, and available support services. (Core)

VI.E.2. Teamwork

Residents must care for patients in an environment that maximizes communication. This must include the opportunity to work as a member of effective interprofessional teams that are appropriate to the delivery of care in the specialty and larger health system. (Core)

VI.E.2.a) Interprofessional teams within the department should include radiation oncologists, medical physicists, radiation therapists, dosimetrists, nurses, dieticians, and social workers. (Detail)

VI.E.2.b) Interprofessional teams outside of the department should include surgical oncologists, medical oncologists, radiologists, pathologists, and primary care physicians. (Detail)

VI.E.3. Transitions of Care

VI.E.3.a) Programs must design clinical assignments to optimize transitions in patient care, including their safety, frequency, and structure. (Core)

VI.E.3.b) Programs, in partnership with their Sponsoring Institutions, must ensure and monitor effective, structured hand-over processes to facilitate both continuity of care and patient safety. (Core)

VI.E.3.c) Programs must ensure that residents are competent in communicating with team members in the hand-over process. (Outcome)

VI.E.3.d) Programs and clinical sites must maintain and communicate schedules of attending physicians and residents currently responsible for care. (Core)

VI.E.3.e) Each program must ensure continuity of patient care, consistent with the program's policies and procedures referenced in VI.C.2, in the event that a resident may be unable to perform their patient care responsibilities due to excessive fatigue or illness, or family emergency. (Core)

VI.F. Clinical Experience and Education

Programs, in partnership with their Sponsoring Institutions, must design an effective program structure that is configured to provide residents with educational and clinical experience opportunities, as well as reasonable opportunities for rest and personal activities.

VI.F.1. Maximum Hours of Clinical and Educational Work per Week

Clinical and educational work hours must be limited to no more than 80 hours per week, averaged over a four-week period, inclusive of all in-house clinical and educational activities, clinical work done from home, and all moonlighting. (Core)

VI.F.2. Mandatory Time Free of Clinical Work and Education

VI.F.2.a) The program must design an effective program structure that is configured to provide residents with educational opportunities, as well as reasonable opportunities for rest and personal well-being. (Core)

VI.F.2.b) Residents should have eight hours off between scheduled clinical work and education periods. (Detail)

VI.F.2.b).(1) There may be circumstances when residents choose to stay to care for their patients or return to the hospital with fewer than eight hours free of clinical experience and education. This must occur within the context of the 80-hour and the one-day-off-in-seven requirements. (Detail)

VI.F.2.c) Residents must have at least 14 hours free of clinical work and education after 24 hours of in-house call. (Core)

VI.F.2.d) Residents must be scheduled for a minimum of one day in seven free of clinical work and required education (when averaged over four weeks). At-home call cannot be assigned on these free days. (Core)

VI.F.3. Maximum Clinical Work and Education Period Length

VI.F.3.a) Clinical and educational work periods for residents must not exceed 24 hours of continuous scheduled clinical assignments. (Core)

VI.F.3.a).(1) Up to four hours of additional time may be used for activities related to patient safety, such as providing effective transitions of care, and/or resident education. (Core)

VI.F.3.a).(1).(a) Additional patient care responsibilities must not be assigned to a resident during this time. (Core)

VI.F.4. Clinical and Educational Work Hour Exceptions

VI.F.4.a) In rare circumstances, after handing off all other responsibilities, a resident, on their own initiative, may elect to remain or return to the clinical site in the following circumstances:

VI.F.4.a).(1) to continue to provide care to a single severely ill or unstable patient; (Detail)

VI.F.4.a).(2) **humanistic attention to the needs of a patient or family; or, (Detail)**

VI.F.4.a).(3) **to attend unique educational events. (Detail)**

VI.F.4.b) **These additional hours of care or education will be counted toward the 80-hour weekly limit. (Detail)**

VI.F.4.c) **A Review Committee may grant rotation-specific exceptions for up to 10 percent or a maximum of 88 clinical and educational work hours to individual programs based on a sound educational rationale.**

The Review Committee for Radiation Oncology will not consider requests for exceptions to the 80-hour limit to the residents' work week. (Core)

VI.F.4.c).(1) **In preparing a request for an exception, the program director must follow the clinical and educational work hour exception policy from the *ACGME Manual of Policies and Procedures*. (Core)**

VI.F.4.c).(2) **Prior to submitting the request to the Review Committee, the program director must obtain approval from the Sponsoring Institution's GMEC and DIO. (Core)**

VI.F.5. **Moonlighting**

VI.F.5.a) **Moonlighting must not interfere with the ability of the resident to achieve the goals and objectives of the educational program, and must not interfere with the resident's fitness for work nor compromise patient safety. (Core)**

VI.F.5.b) **Time spent by residents in internal and external moonlighting (as defined in the ACGME Glossary of Terms) must be counted toward the 80-hour maximum weekly limit. (Core)**

VI.F.5.c) **PGY-1 residents are not permitted to moonlight. (Core)**

VI.F.6. **In-House Night Float**

Night float must occur within the context of the 80-hour and one-day-off-in-seven requirements. (Core)

VI.F.7. **Maximum In-House On-Call Frequency**

Residents must be scheduled for in-house call no more frequently than every third night (when averaged over a four-week period). (Core)

VI.F.8. **At-Home Call**

VI.F.8.a) **Time spent on patient care activities by residents on at-home call must count toward the 80-hour maximum weekly limit. The frequency of at-home call is not subject to the every-third-night limitation, but must satisfy the requirement for one day in seven free of clinical work and education, when averaged over four weeks.** **(Core)**

VI.F.8.a).(1) **At-home call must not be so frequent or taxing as to preclude rest or reasonable personal time for each resident.** **(Core)**

VI.F.8.b) **Residents are permitted to return to the hospital while on at-home call to provide direct care for new or established patients. These hours of inpatient patient care must be included in the 80-hour maximum weekly limit.** **(Detail)**

***

*__Core Requirements:__ Statements that define structure, resource, or process elements essential to every graduate medical educational program.

Detail Requirements: Statements that describe a specific structure, resource, or process, for achieving compliance with a Core Requirement. Programs and sponsoring institutions in substantial compliance with the Outcome Requirements may utilize alternative or innovative approaches to meet Core Requirements.

Outcome Requirements: Statements that specify expected measurable or observable attributes (knowledge, abilities, skills, or attitudes) of residents or fellows at key stages of their graduate medical education.

Osteopathic Recognition

For programs seeking Osteopathic Recognition for the entire program, or for a track within the program, the Osteopathic Recognition Requirements are also applicable. (http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/Osteopathic_Recogniton_Requirements.pdf)