

## **FIRST Year (PGY-2)**

### **Clinical Radiation Oncology/Medical Physics/Dosimetry Diagnostic Radiology**

#### **PATIENT CARE:**

**Goal:** Complete a specific cancer-directed history, correct cancer staging and complete physical examination skills on patients.

**Objective:** The resident shall demonstrate that he/she has learned skills and techniques to obtain complete and thorough history of patients in order to accurately assess patient and stage cancer, and gain written consent for treatment by:

- 1) Obtaining patient information of history and physical exams through interpersonal and communication skills.
- 2) Demonstrating knowledge of anatomy, epidemiology, natural history of cancer, and appropriate staging studies (blood work, scans, etc.) tissue diagnosis, and pathology and imaging review.
- 3) Oral and written demonstration of cancer stages.
- 4) Correctly interpreting clinical data such as pathology, laboratory, etc.
- 5) Reviewing all possible treatment options appropriate for specific cases with attending faculty. Faculty member will discuss therapeutic options including advantages and disadvantages of each.
- 6) Exhibiting knowledge of simulation procedures using CT simulator under the supervision of attending physicians.
- 7) Exhibiting skills in prescribing treatment, and being familiar with the total dose, dose per fraction and beam energies.
- 8) Observing and assisting special procedures such as electron beam, brachytherapy, total body irradiation, and radiosurgery.
- 9) Researching and reviewing major studies in the literature including results and toxicity of therapy.

#### **MEDICAL KNOWLEDGE:**

**Goal:** Learn medical knowledge essential to extraordinary care of patients in radiation oncology.

**Objective:** In order to gain appropriate medical knowledge needed for a PGY-2 resident of radiation oncology, he/she should attend weekly conferences and chart rounds, biweekly education conference/journal club within the department, and monthly Omaha Oncology Journal Club. He/she should demonstrate knowledge in the following:

- 1) Basic anatomy, epidemiology, natural history of cancer and the concept of cancer staging.
- 2) Fundamental physics, radiation biology and basic biology of cancer.
- 3) Normal tissue tolerance.
- 4) The concept and interaction of multi-modal therapy for cancer.
- 5) Conventional radiation therapy including the concept of drawing blocks of multileaf to shape the treatment fields and protect normal tissues.
- 6) CT anatomy of different regions of the body to familiarize the concept of 3D conformal radiotherapy and its planning process.
- 7) The concept and its applications of evidence-based medicine.
- 8) Evidence of knowledge in major clinical trials and landmark studies; their designs and outcomes.

## **PRACTICE-BASED LEARNING IMPROVEMENT:**

**Goal:** Identify personal and practice improvement strategies.

**Objective:** Residents will demonstrate the ability to:

- 1) Recognize limitations in own knowledge base and clinical skills
- 2) Understand and address the need for lifelong learning
- 3) Develop skills for obtaining and evaluating up-to-date information from scientific and practice literature and other sources to assist in the quality care of patients. This shall include, but not be limited to:
  - a) Use of medical libraries
  - b) Use of information technology, including internet-based searches and literature databases (e.g., Medline)
  - c) Use of drug information databases
  - d) Active participation, in weekly teaching conferences and weekly chart rounds, M&M conferences, and multidisciplinary tumor boards including Thoracic, Head and neck, Breast, GI, GU, CNS, GYN, Lymphoma, and Pediatric.
- 4) Evaluate caseload and practice experience in a systematic manner. This may include:
  - a) Case-based learning
  - b) Use of best practices through practice guidelines or clinical pathways
  - c) Review of patient records
  - d) Obtaining evaluations from patients (e.g., outcomes and patient satisfaction)
  - e) Employment of principles of quality improvement in practice
  - f) Obtaining appropriate supervision and consultation
  - g) Maintaining a system for examining errors in practice and initiating improvements to eliminate or reduce error

**Goal:** Be aware of own limitations, strengths and weaknesses.

**Objective:** A resident shall demonstrate a desire for learning and the ability to comprehend and develop strategies for further learning in order to always provide the best patient care, and continuous self-improvement.

- 1) Faculty should be able to observe a resident's ability to identify areas of personal strengths and weaknesses.
- 2) A resident shall provide to the Program Director twice annually (during evaluation process) a list of strengths and weaknesses. A resident-written list of learning goals should be included as well as steps necessary for success in attaining those goals.

## **RESEARCH:**

**Goal:** Develop a research idea to be carried out during the subsequent residency years.

**Objective:** A resident shall present research ideas to the Program Director at the final evaluation meeting of the PGY-2. These ideas will reflect the residents' individual interests. The resident will be provided:

- 1) Exposure to ongoing clinical protocols and research projects within the Radiation Oncology Department.
- 2) Exposure to ongoing clinical protocols and research projects within the University of Nebraska Medical Center.
- 3) A research rotation during his/her PGY-3 to carry out the proposed research project.

## **INTERPERSONAL AND COMMUNICATIONS SKILLS:**

**Goal: Develop excellent interpersonal and communication skills that result in the effective exchange of information and collaboration with patients and their families.**

**Objective:** A resident will learn and demonstrate the ability:

- 1) To listen to and understand patients and to attend to nonverbal communication
- 2) To communicate effectively with patients using verbal, nonverbal, and written skills as appropriate to the educational and intellectual levels of patients and their families
- 3) To demonstrate socio-cultural sensitivity to patients and their families; To respect patients' cultural, ethnic, religious and economic backgrounds
- 4) To develop and maintain a therapeutic alliance with patients by instilling feelings of trust, honesty, openness, rapport, and comfort in the relationship with physicians
- 5) To provide explanations of treatment options to patients that are "jargon-free" and geared toward the educational/intellectual levels of patients and families so that the information is understandable and practical
- 6) To partner with patients to develop an agreed upon healthcare management plan
- 7) To understand the impact of physicians' own feelings and behavior so that it does not interfere with appropriate treatment
- 8) To educate patients and their families about medical, psychosocial and behavioral issues
- 9) To ensure that the patient has understood the communication
- 10) To maintain confidential information that includes but not limited to:
  - a. The results of the assessment
  - b. Medical information and prognosis
  - c. Medical consents
  - d. Counseling and palliative care

**Goal: Communicate effectively as a member of the healthcare team.**

**Objective:** The resident will demonstrate the ability to:

- 1) Communicate effectively and work collaboratively with healthcare professionals involved in the lives of patients and families.
- 2) Obtain, interpret, and evaluate consultations from other medical specialties. This shall include:
  - a. Knowing when to solicit consultation and having sensitivity to assess the need for consultation
  - b. Formulating and clearly communicating the consultation question
  - c. Discussing the consultation findings with the consultant
  - d. Discussing the consultation findings with the patient and family
- 3) Serve as an effective consultant to other medical specialists and community agencies by demonstrating the abilities to:
  - a. Communicate effectively with the requesting party to refine the consultation question
  - b. Maintain the role of consultant
  - c. Communicate clear and specific recommendations
  - d. Respect the knowledge and expertise of the requesting professionals

**Goal: Develop positive working relationships with MD and non-MD personnel.**

**Objective:** Resident will demonstrate ability to:

- 1) Collaborate with and respect faculty opinions and experiences through careful listening, observation and follow-through skills.
- 2) Collaborate with and respect non-MD personnel through careful listening, observation and follow-through skills.

## **PROFESSIONALISM:**

**Goal: Commitment to carrying out professional responsibilities in patient care.**

**Objective:** The resident shall demonstrate the ability in:

- 1) Responding to communication from patients and health professionals in a timely manner
- 2) Establishing and communicating back-up arrangements, including how to seek emergent and urgent care when necessary
- 3) Using medical records for appropriate documentation of the course of illness and its treatment
- 4) Providing coverage if resident is unavailable (e.g., when out of town or on vacation)
- 5) Coordinating care with other members of the medical and/or multidisciplinary team
- 6) Providing for continuity of care, including appropriate consultation, transfer, or referral if necessary

**Goal: Adherence to ethical principles in the delivery of care.**

**Objective:** The resident will demonstrate:

- 1) Integrity, honesty, compassion and confidentiality.
- 2) Provide consultation and obtain informed consent/assent for procedures
- 3) Disclose conflict of interest
- 4) Respect for patients and their families, and their colleagues as persons, including their ages, cultures, disabilities, ethnicities, genders, socioeconomic backgrounds, religious beliefs, political leanings, and sexual orientations.
- 5) Understanding of and sensitivity to end of life care and issues regarding provision of care
- 6) Review their professional conduct and remediate when appropriate.
- 7) Participation in the review of the professional conduct of their colleagues
- 8) Awareness of safety issues, including acknowledging and remediating medical errors, should they occur

## **SYSTEMS-BASED PRACTICE:**

**Goal: Awareness of and responsiveness to the larger context and system of health care.**

**Objective:** Residents will demonstrate the ability to:

- 1) Understand diverse systems involved in treating patients of all ages
- 2) Understand how to use the systems as part of a comprehensive system of care in general and as part of a comprehensive, individualized treatment plan
- 3) Work effectively in various health care delivery settings and systems relevant to the practice of radiation oncology
- 4) Coordinate patient care within the health care system relevant to the practice of radiation oncology
- 5) Incorporate considerations of cost awareness and risk-benefit analysis in patient and/or population-based care as appropriate

**Goal: Effective utilization of various resources in the system to provide optimal health care.**

**Objective:** Residents will demonstrate ability to:

- 1) Advocate for quality patient care and optimal patient care systems
- 2) Work in inter-professional teams to enhance patient safety and improve patient care quality
- 3) Participate in identifying system errors and implementing potential systems solutions.