RADIATION THERAPIST						
Job Code: 500030	FLSA Status: Non-Exempt	Mgt. Approval: T. Yambor	Date: February 2024			
Department: Radiation Oncology		HR Approval: M. Grayson	Date: February 2024			

JOB SUMMARY

The Radiation Therapist is responsible for administering therapeutic doses of ionizing radiation; using advanced level linear accelerators, Tomotherapy treatment units, or proton therapy units; recording and verifying treatment software; as well as simulating patients in accordance with prescription and instruction of radiation oncologists.

The Radiation Therapist performs routine, complex, and specialized work as well as integration and administration of new technology. Complex patient procedures include: stereotactic radiosurgery (SRS); fractionated stereotactic radiotherapy (FSRT); pulsed reduced dose rate treatments (PRDR); advanced use of the ARIA electronic radiation oncology software, optical guidance, Align RT,, respiratory management, intensity modulated radiation therapy (IMRT), dynamic wedge, cone beam CT imaging (CBCT), total body irradiation, View Ray treatments, SBRT, proton treatments, and complex tumor localization and tracking procedures. The incumbent provides patient care within a broad range of health care needs, including operating radiographic equipment in the special procedure's suites. In addition to performing complex procedures independently, the Radiation Therapist is responsible for providing clinical instruction to radiation therapy students as well as patient scheduling, anticipating changes in field boosts, simulations, dose limitations, and proper billing and documentation.

The Radiation Therapist is responsible for contributing to the efficient operation of the department. The Radiation Therapist is expected to become proficient in the specialized areas that their supervisor deems necessary by one year of date of hire. Work at this level is performed under the general supervision of the Radiation Therapist Lead and the Radiation Therapy Services Technical Supervisor.

MAJOR RESPONSIBILITIES

- Maintain and prepare rooms, equipment, and materials for patient care as needed and as required by supervisor.
- · Assesses treatment rooms to assure all equipment is operational and quality checks have been performed.
- Prepares treatment room and equipment for patients according to prescription regarding immobilization devices, field size, treatment distances, shielding devices, gantry and/or collimator angles, etc.
- Performs quality assurance procedures and reports any deficiencies to supervisor and/or physicist.
- Performs quality assurance warm-up tests on treatment units and simulators; corrects minor faults and/or initiates corrective action following established protocols.
- Implement and deliver accurately the prescribed planned course of radiation therapy utilizing megavoltage equipment, adhering to acceptable departmental, institutional, governmental, and professional standards.
- Reviews patients' treatment plans and parameters as part of a "time out" and quality audit prior to the first treatment and daily checks patient ID, prescription, and dose to date prior to delivery of treatment.
- Explains procedures to patients and the means of communication during treatment and procedure in case of an emergency.
- Transfers patients safely to the treatment couch, giving special attention to catheters, IV's, wheelchairs, and that cart wheels are locked and insures adequate personnel are available to transport if patient cannot move on his/her own.
- Maintains patient field markings.
- Positions patients and modifies standard procedure to accommodate patients' conditions.
- Reviews and verifies daily treatment time and/or monitor units and delivers prescribed dose while monitoring machine operation.
- Maintains visual and/or audio communication with patient during treatment.
- Obtains required electronic portal images during prescribed course of treatment according to department standards. These images could include but are not limited to MVCT, KVCT, KV portal image, MV portal image, and MRI image.
- Practices radiation protection for the patient, self, and others; applies radiation safety principles.
- Assesses and evaluates patients for unusual reactions and/or medical problems and reports conditions to a radiation oncology nurse and/or a radiation oncologist.
- Recognizes emergency patient conditions and assists and/or initiates first aid and/or basic life support procedures when appropriate.
- Maintains electronic and/or paper charts for patient setups and treatments using both ARIA and HealthLink applications.
- Interacts with patients and families concerning their physical and psychological needs on a daily basis and reports any unusual situations to the appropriate personnel.
- Reinforces radiation oncologist's and nurses' advice to patients regarding skin care, diets, general welfare and/or reactions to treatment/care
- Responsible for the administration of new technology associated with the treatment of patients using radiation. This may include but is not limited to, SRS, intraoperative radiotherapy (IORT), FSRT, PRDR, IMRT, SBRT, respiratory control, View Ray simulation or treatment, Align RT surface guided technology, proton therapy simulations and treatment, and high dose rate brachytherapy.
- Responsible for following department guidelines and treating an emergent patient in Unplanned Treatment Mode when necessary late in the day or on the weekend.
- Responsible for treating critical care patients, patients under anesthesia, or patients with a cardiology device such as a pacemaker.
- Performs routine and complex tumor localization procedures if required by supervisor using a CT or MRI simulator or BodyTom.

- Ensures that physicians have obtained patient consent.
- Explains simulation procedure to patient and answers technical questions.
- Accurately applies skin markings on patients' skin and instructs patients in proper care in preserving markings.
- Determines and adapts exposure factors for various patient conditions, equipment, accessories, and contrast media and obtains diagnostic scans with minimum radiation exposure.
- Demonstrates knowledge of computed tomography instrumentation including selecting appropriate menu options, performing quality assurance tests and archiving.
- Prepares and administers proper contrast agents under the direction of a physician and correctly labels all syringes and containers.
- Fabricates, selects, and uses appropriate immobilization devices using safe practice techniques.
- Performs routine tumor localization procedures and interprets simulation requests.
- Takes required electronic images. Verifies with medical staff to ensure proper treatment fields are established before the patient is ready for treatment.
- Assesses the patient's clinical signs and symptoms and adjusts standard techniques as necessary.
- Correlates cross-sectional anatomy with other anatomical presentations.
- Differentiates between optimal and suboptimal images to assess completion of procedure.
- Properly saves and stores final CT images.
- Records all pertinent information electronically using simulation software and in patients' treatment charts.
- Evaluates CT or MRI images for appropriate positioning and image quality.
- Provides basic patient education in relationship to skin care, diet, parking, and daily radiation therapy routine.
- Place catheters when indicated in order using sterile technique.
- Use vaginal markers, rectal markers, or wire scars when indicated by the physician order.
- Answers telephone, checks patients into clinic, prepares release of information/request for information forms, makes appointments for
 patients, prepares charts and adds results of tests or other information to patient chart.
- Accesses electronic medical records appropriately as needed.
- · Performs copying and filing as needed.
- Maintains orderliness and cleanliness of radiation therapy department.
- Applies correct billing codes to procedures performed.
- Notifies MD/RN of abnormal lab results, (such as creatinine level at the CT/sim).
- Coordinates appointments with other hospital areas such as chemotherapy, anesthesia, or cardiology.
- Assists nursing in tasks if needed such as rooming patients, side effect management, dressing changes, etc.
- Provides clinical instruction to less experienced or newly hired therapists when needed.
- Provides clinical instruction for students and may provide didactic instruction.
- Participates in task groups and/or committees as assigned.
- Stay current on specialization (such as CT, View Ray, proton therapy) as required/determined by supervisor.

ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.

JOB REQUIREMENTS Education Graduate of a School in Radiation Therapy Technology Minimum Preferred Work Experience Minimum None Preferred Licenses & Certifications Minimum Certified as a Radiation Therapist by the American Registry of Radiologic **Technologists CPR** certification Preferred Required Skills, Knowledge, and Abilities Ability to function safely and effectively as a radiation therapist in the clinical environment. Ability to think critically and problem solve, making rational and appropriate clinical decisions. Ability to work effectively in a team of radiation therapists and in the radiation oncology Ability to interpret medical terminology and to communicate with patients and family concerning patient related needs and problems. Ability to understand written and oral communication from medical staff and with patients, family, public and other professionals. Ability to interpret basic computerized treatment plans, to identify anatomic structures on radiographs and cross-sectional images. Ability to interact with patients and family in such a manner as to inspire confidence

and gain patient's cooperation.

- Ability to communicate (understand written and oral communication) with medical staff, nursing, clerical and radiation oncologists involved with patient care.
- Ability to effectively send, receive and respond to information; including the ability to read, write, listen, speak, observe, and use computers.

Clinical Skill:

- Knowledge of human anatomy and physiology; radiation physics; radiation biology; pathology and malignant disease: tissue and organ dose tolerances.
- Knowledge to evaluate and assess the patient's status and condition in order to deliver a prescribed course of therapy.
- Knowledge of working with high-energy radiation materials and equipment and the hazards involved.
- Knowledge to assess and evaluate psychological and physical changes in the patient's condition and formulate appropriate actions.
- Knowledge of basic sterile and isolation technique.
- Knowledge of principles for transferring, positioning, immobilizing and restraining patients. Knowledge of safely transporting patients, including those with fractures and spinal cord injuries.
- Ability to interpret patient side effects and/or complications in order to create an interdisciplinary management strategy that fosters prevention, healing and comfort.
- Ability to operate complex radiation therapy equipment, specialized diagnostic x-ray/CT equipment, electronic portal imaging, ARIA software, MLC (multi-leaf collimator equipment), dynamic wedges, Tomotherapy, View Ray, tracking systems, and other new technologies as implemented.
- Knowledge of special procedures, such as but not limited to stereotactic, respiratory control techniques, SBRT, OSMS.
- Skill and ability in communicating with staff and patients, earning patient confidence, and respecting patient concerns including privacy and confidentiality.
- Knowledge of age specific requirements for communication with and clinical care of children (pediatrics and adolescents), adults, and elderly patients.
- Ability to make appropriate set-up decisions based upon identification of anatomy on images and comparison to standard treatment images with minimal supervision of higher level therapists and radiation oncologists.
- Advanced knowledge of clinic functions and ability to identify solutions to problems.
- Knowledge of charge entry system and ability to enter charges accurately.
- Knowledge of and ability to use required computer systems.

AGE SPECIFIC COMPETENCY (Clinical jobs only)

Identify age-specific competencies for direct and indirect patient care providers who regularly assess, manage and treat patients.

Instructions: Indicate the age groups of patients served either by direct or indirect patient care by checking the appropriate boxes below. Next,

Infants (Birth – 11 months)	Adolescent (13 – 19 years)
Toddlers (1 – 3 years)	Young Adult (20 – 40 years)
Preschool (4 – 5 years)	Middle Adult (41 – 65 years)
School Age (6 – 12 years)	Older Adult (Over 65 years)

JOB FUNCTIONS

Review the employee's job description and identify each essential function that is performed differently based on the age group of the patient.

PHYSICAL REQUIREMENTS

Indicate the appropriate physical requirements of this job in the course of a shift. *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

Physical Demand Level	Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
Sedentary: Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as dockets, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are	Up to 10#	Negligible	Negligible

	sedentary if walking and standing are required only occasionally and other sedentary criteria are met.			
	Light: Ability to lift up to 20 pounds maximum with frequent lifting and/or carrying of objects weighing up to 10 pounds. Even though the weight lifted may only be a negligible amount, a job is in this category when it requires walking or standing to a significant degree.	Up to 20#	Up to 10# or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	Negligible or constant push/pull of items of negligible weight
Х	Medium: Ability to lift up to 50 pounds maximum with frequent lifting/and or carrying objects weighing up to 25 pounds.	20-50#	10-25#	Negligible-10#
	Heavy: Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	50-100#	25-50#	10-20#
	Very Heavy: Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	Over 100#	Over 50#	Over 20#
List	any other physical requirements or bona fide			
occu	upational qualifications:			

Note: The purpose of this document is to describe the general nature and level of work performed by personnel so classified; it is not intended to serve as an inclusive list of all responsibilities associated with this position.