

UW HEALTH JOB DESCRIPTION

Intern – Radiation Dosimetry

Job Code: 500028	FLSA Status: Non Exempt	Mgt. Approval: T Yambor	Date: 7-17
Department : Radiation Oncology		HR Approval: CMW	Date: 7-17

JOB SUMMARY

The Intern – Radiation Dosimetry performs routine technical work in Radiation Oncology treatment planning while cultivating basic skills. The Intern – Radiation Dosimetry is expected to be capable of developing routine radiotherapy treatment plans from 3D medical images (CT, MRI, PET) involving vital areas of the body with assistance. This person also performs ancillary dosimetry tasks such as mold room duties, creating electronic patient records and billing for dosimetry services. Work is performed under close supervision, progressing to limited supervision, by Radiation Physicists. It is expected that advanced dosimetry skills and independence in all areas of dosimetric services will be developed while in this position. This position reports to the Radiation Oncology Director.

MAJOR RESPONSIBILITIES

1. Performance of non-planning dosimetry activities
 - a. Mold room (creation of patient specific devices such as bolus and electron blocks under the direction of objective or senior Dosimetrist)
 - b. Patient specific dosimetry (in-vivo dosimetry)
 - c. Implement the institutional electronic charting and workflow systems.
 - d. Implement the institutional billing methods for a high standard for proper and accurate billing.
 - e. Order and maintain supplies for mold room and in-vivo dosimetry
 - f. Edit and maintain existing policy and procedures for dosimetry functions
2. Performance of radiotherapy treatment plans
 - a. Manual 2D monitor unit (MU) calculations
 - b. 2D plans created from conventional simulation
 - c. 3D plans created from CT simulation using computer based treatment-planning systems.
 - i. Image preparation (e.g.: import, assign CT-density table and image-registration)
 - ii. Setup and dose point creation, implementing dose prescriptions
 - iii. Anatomical and planning contour delineation
 - iv. Communication with physicians and physicists regarding planning parameters
 - d. Intensity Modulation Radiation Therapy (IMRT) planning - assist in plan creation
 - e. Participate in the consultation regarding the proper setup and immobilization of new patients as needed.
 - f. Transfer plans between treatment units
 - g. Adjust plans, recalculate dose and document changes according to clinical needs
 - h. Establish work priorities when applicable
3. Departmental service
 - a. Assist in updating and creating new policy and procedures for dosimetry functions.
 - b. Participate in dosimetry related projects designed to improve radiation therapy processes.
 - c. Participation in department-wide committees as an observer as time permits (e.g.: quality improvement and safety)
 - d. Participate in chart rounds once a quarter or more frequently if scheduling levels permit.

Performance Measures:

1. Dosimetry QA chart check
2. Physics Initial Check
3. Annual performance work review by physics supervisor and department manager
4. Periodic review of DHO projects and procedure documentation development
5. Attendance at in-service, chart rounds, grand rounds meetings and other organizational meetings as required
6. Attendance at the Physics-Therapist monthly meeting
7. Error rate in coding and documentation of billing procedures

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

UW HEALTH JOB DESCRIPTION

STANDARDS.

JOB REQUIREMENTS

Education	Minimum	Graduate from school in Radiation Therapy Technology and accepted admission to Master of Science in Medical Dosimetry Program
	Preferred	
Work Experience	Minimum	
	Preferred	
Licenses & Certifications	Minimum	Certified as a Radiation Therapist (Radiation Therapy Technologist) by the American Registry of Radiologic Technologists.
	Preferred	
Required Skills, Knowledge, and Abilities		
<ul style="list-style-type: none"> • Strong mathematical and analytical skills, including algebra, geometry, and trigonometry. • Ability to function safely and effectively in the Radiation Oncology clinical environment. • Ability to work effectively within the radiation oncology team. • Ability to interpret medical terminology • Ability to understand written and oral communication from medical staff and with patients, family, public and other professionals. • Ability to identify anatomic structures on radiographs and cross-sectional radiographic images and MRI. • 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, physics staff, radiation therapists, nursing, and clerical staff 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. <p>Clinical Skill:</p> <ul style="list-style-type: none"> • Knowledge of human anatomy and physiology; radiation physics; radiation biology; pathology and malignant disease; tissue and organ dose tolerances. • Knowledge of working with high-energy radiation materials and equipment and the hazards involved. • Knowledge of the workings and use of complex radiation therapy treatment machines, specialized diagnostic x-ray equipment, electronic portal imaging, ARIA software, MLC (multi-leaf collimator equipment), optical guidance systems, dynamic wedges, Tomotherapy, tracking systems, and other new technologies as implemented and assigned. • Ability to make appropriate patient set-up recommendations to produce reproducible, accurate and precise treatment plans. • Skill and ability in interpreting treatment planning orders and in communicating with medical and radiation physics staff to develop appropriate treatment plans. • Respecting and honoring patient concerns including privacy and confidentiality. • Knowledge of functions of a radiation oncology clinic. • 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)
-----------------------------	----------------------------

UW HEALTH JOB DESCRIPTION

	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 sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	Up to 10#	Negligible	Negligible
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
X 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 occupational 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.