

RADIATION THERAPIST SERIES

Code No.	Class Title	Occ. Area	Work Area	Prob. Period	Effective Date	Last Action
4720	Radiation Therapist I	12	444	6 mo.	11/15/09	Rev.
4721	Radiation Therapist II	12	444	6 mo.	11/15/09	Rev.
4722	Radiation Therapist III	12	444	6 mo.	11/15/09	Rev.

Promotional Line: 250

Series Narrative

Employees in this series are specially trained and qualified professionals who administer ionizing radiation to patients in the treatment of malignant and/or non-malignant diseases (especially tumors), operating conventional radiation therapy equipment. Members of the patient treatment planning team include the Radiation Physicist (who calibrates the equipment), the Dosimetrist (who calculates optimal dosage, taking into account a number of factors, including location of the disease, size of the mass, and the beam energy), the Radiation Oncologist (who prescribes treatment protocol), and the Radiation Therapist.

The incumbent, independently or in coordination with (an)other Radiation Therapist(s) in the department, performs simulation procedures and delivers ionizing radiation therapy to patients in accordance with the written prescription and instructions provided by the Radiation Oncology physician and the treatment plan as prepared by the Physicist's staff.

DESCRIPTIONS OF LEVELS OF WORK

Level I: Radiation Therapist I

4720

Employees at this level operate radiation therapy equipment as prescribed by a Radiation Oncologist to deliver prescribed doses of radiation in the treatment of malignant or non-malignant diseases. They work under the direct supervision of more senior Radiation Therapists and Radiation Oncologists.

A Radiation Therapist I typically –

1. positions the patient for treatment utilizing appropriate patient immobilization devices
2. delivers prescribed doses of radiation to specified areas of the body, which includes assuring accurate equipment parameters and alignment through treatment verification systems, applying dosimetry calculations and isodose plans to treatment procedure, and recognizing and implementing changes in treatment set-ups
3. maintains daily records and documents of each patient's treatment (e.g., treatment parameters, set-up, special instructions, delivery of treatment, photographs, test results); records, documents, and files films of the patient's treatment area weekly for review
4. maintains treatment rooms through daily machine warm-up and documentation procedures (e.g., report equipment functioning, maintain inventory, restock supplies)
5. performs simulation and treatment procedures as instructed by the Radiation Oncologist
6. performs weekly verification of patient treatment site to ensure ongoing accuracy
7. performs proper billing procedures in accordance with departmental policies

8. performs related duties as assigned

Level II: Radiation Therapist II**4721**

Employees at this level administer radiation therapy to patients and assist the chief therapist in the implementation and coordination of special procedures within the department. They work under general supervision from a designated supervisor.

A Radiation Therapist II typically –

1. assists the Radiation Oncologist, Physicist, and Chief Technologist in the simulation of treatment
2. transmits simulation procedures to the treatment machines to assure accurate reproduction of the treatment area
3. positions patients in proper orientation to the simulator using appropriate immobilization devices and treatment aids
4. assists the treatment planning team in basic calculations of radiation dosage by gathering information and measurements (e.g., patient's thickness, beam energy, tumor depth); interprets formulas and tables necessary to perform dosimetry calculations
5. explains the treatment procedures to the patient and answers any questions
6. maintains daily records and documents of each patient's treatment; ensures that charts are assembled in a timely manner and contains appropriate information (e.g., set-up photographs, field photographs, face photo, test results, etc.); reviews and documents port film on a daily basis
7. performs weekly verification of patient treatment site to ensure ongoing accuracy
8. maintains treatment rooms through daily machine warm-up and documentation procedures (e.g., report equipment functioning, maintain inventory, restock supplies)
9. accurately performs proper billing procedures in accordance with departmental policies
10. assists in and monitors the orientation and training of Radiation Therapist I; may perform initial set-up checks on complex patients for Radiation Therapist I staff.
11. performs other duties as assigned

Level III: Radiation Therapist III**4722**

Employees at this level are responsible for the accurate and efficient functioning of the radiation oncology section. They are responsible for the development of protocol, supervision of staff, and the initiation of patient treatment. They work under administrative review from a designated administrator.

A Radiation Therapist III typically –

1. maintains treatment rooms through daily machine warm-up and documentation procedures (e.g., reports equipment functioning, maintains inventory, restocks supplies)
2. performs simulation and treatment procedures as instructed by the Radiation Oncologist

3. assumes the role of expert therapist and is available to patients and staff to answer questions or address complex clinical issues and concerns
4. maintains daily records and documents of each patient's treatment; ensures that charts are assembled in a timely manner and contains appropriate information (e.g., set-up photographs, field photographs, face photo, test results, etc.); reviews and documents port film on a daily basis
5. performs weekly verification of patient treatment site to ensure ongoing accuracy
6. stores, sterilizes, and prepares applicators containing radioactive substances used in implant procedures
7. assists in the preparation of sealed radioactive materials used in radiation treatments such as cobalt, radium, cesium, and isotopes
8. accurately performs proper billing procedures in accordance with departmental policies
9. may perform initial set-up checks on complex patients for Radiation Therapist I staff
10. collaborates with the director/supervisor in the orientation, training, and education of newly hired staff and/or medical residents
11. works on special clinical, equipment, and quality improvement projects at the direction of the supervisor/director
12. performs other duties as assigned

MINIMUM ACCEPTABLE QUALIFICATIONS FOR ENTRY INTO

Level I: Radiation Therapist I

4720

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Licensure in radiation therapy technology as required by the Illinois Emergency Management Agency (IEMA)

<http://www.state.il.us/iema/dns.asp>

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. demonstrates professional customer service skills when working with patients, family members, significant others, coworkers, other Medical Center staff, and vendors.
2. working knowledge of procedures for the safe operation of simulator, linear accelerator, and brachytherapy equipment
3. working knowledge of the appropriate use of patient immobilization devices (headrests, casts, sponges, and straps)
4. working knowledge of radiation coincidental light fields, source distance indicators, isocentric laser lights, and computerized treatment planning
5. working knowledge of how to apply dosimetry calculations and isodose plans to treatment procedures

6. working knowledge of University, Medical Center, and Departmental policies and procedures

Level II: Radiation Therapist II**4721**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Licensure in radiation therapy technology as required by the Illinois Emergency Management Agency (IEMA)

<http://www.state.il.us/iema/dns.asp>

2. American Registry of Radiologic Technologists (ARRT) Board certified
3. One year (12 months) of full-time work experience in radiation therapy comparable to a Radiation Therapist I level of this series

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. knowledge of specific methods necessary to perform localization procedures
2. knowledge of basic methods used in calculations relating to radiation dosage
3. working knowledge of interpretation of requests and instructions from the medical staff
4. basic knowledge of methods and procedures necessary in the fabrication of beam shielding devices
5. knowledge of basic statistical recording methods
6. ability to perform simulation procedures
7. ability to train, instruct and educate radiation therapy students

Level III: Radiation Therapist III**4722**

CREDENTIALS TO BE VERIFIED BY PLACEMENT OFFICER

1. Licensure in radiation therapy technology as required by the Illinois Emergency Management Agency (IEMA)

<http://www.state.il.us/iema/dns.asp>

2. American Registry of Radiologic Technologists (ARRT) Board certified
3. Five years (60 months) of experience in radiation therapy or a related science or health care field
 - a. Bachelor's Degree (120 semester hours) equals 3 years (36 months)

and

- b. Two years (24 months) Full-time work experience comparable to a Radiation Therapist II level of this series, including supervisory experience

PERSONAL ATTRIBUTES NEEDED TO UNDERTAKE JOB

1. knowledge of state and federal guidelines regulating radiation therapy
2. knowledge of technical aspects of complicated radiation therapy
3. simulation and treatment planning skills
4. analytical skills
5. organizational skills
6. ability to formulate plans and goals
7. ability to assign tasks and delegate work
8. ability to evaluate the work of others