Medical Radiation Therapist



What is a Medical Radiation Therapist?

A health care professional primarily concerned with the design and implementation of radiation treatment as well as issues of care and well-being for patients diagnosed with cancer and other conditions.

Roles of a Medical Radiation Therapist

- Follow the prescriptions of radiation oncologists (specialist doctor) to work out a treatment plan that delivers the precise radiation dosage to the diseased area while minimising the dose to unaffected tissues
- Provide care and support to the patient undergoing the radiation therapy and their carer.
- Use simulators and/or CT scanners to identify the areas to be treated and those to be avoided
- Calculate the precise radiation dose required and start the process of distributing the dose on a planning computer system, and record details of procedures to be utilised
- Give detailed treatment plans to radiation oncologists for approval
- Explain procedures and treat the patient according to developed plan
- Position and stabilise patients in preparation for treatment delivery
- Monitor the patient carefully during the treatment
- Operate the treatment machines, associated equipment and computer verification systems to deliver the planned treatment accurately
- Observe quality assurance procedures and record dosage and other relevant details on patients'
 record sheets
- Advise the patient about self-care procedures for radiation treatment side effects, or refer the patient for further assistance
- Supervise and train students allocated from universities in the practical aspects of radiation therapy
- Participate in patient and community education regarding radiation therapy.

Radiation therapists work in hospitals or radiation oncology centres. They work in teams which include radiation oncologists, nurses, medical physicists and other hospital staff.

Work in a multidisciplinary team Career Opportunities

- Level 1 1st Year also known as Professional Development Year as an entry level practitioner
- Level 2 Progressive development of skills from year 2 with 4 yearly increments in pay
- Level 3 Personal grading for specialist skills and/or post graduate study
- Level 4 Responsible for specific section of department or practice e.g. CT, Ultrasound, Trauma, Mobiles, etc. or site manager in smaller public facility
- Level 5 & 6 Management positions (as Manager or Deputy) in sites with over 200 bed equivalent

Radiation treatment centers are usually found only in major cities. The career structure for radiation therapists allows for professional development and promotion in technical, research and managerial areas.

Prospects remain reasonably strong. Factors which influence demand for this occupation include government funding and health policy, advances in medicine and technology, ageing of the population, and the incidence of cancer.

Qualifications Required

Bachelor of Science in Medical Radiation Sciences (Radiation Therapy)- To become a Radiation Therapist you usually have to study medical radiation science at university. Prerequisite subjects, or assumed knowledge, in one or more of English, mathematics, physics, chemistry and biology are normally required.

Supervision Provided

1st year after qualification a clinical year called Professional Development Year is required to gain professional qualification. This is a mentoring year where the new graduate works as a member of the team but there is guidance and supervision available. A comprehensive orientation program is provided for all new staff members with ongoing support.

What sort of person should I be?

A radiation therapist is a person who wants to work with high technology equipment and computers but wants to have personal contact with patients over a period of time. A patient will have up to 7 weeks of treatment and as a radiation therapist you will see them each day and develop a relationship with them while treating them with very sophisticated equipment.

Personal skills required of a Radiation Therapist

- Interest and ability in science
- Able to work neatly and accurately
- Able to communicate well
- Able to work as part of a team
- Caring and have an understanding nature