

Professions in Radiation Therapy

Radiation Oncologist

Radiation oncologists are physicians who oversee the care of each cancer patient undergoing radiation treatment. After determining whether a patient is a candidate for radiation therapy they review the side effects and benefits of treatment with the patient. Next they develop and prescribe each cancer patient's treatment plan, making sure that every treatment is accurately given. They monitor the patient's progress and adjust treatment to make sure patients receive quality care. Radiation oncologists also help identify



and treat any side effects of radiation therapy. They work closely with other physicians and all members of the radiation oncology team. Radiation oncologists have completed four years of college, four years of medical school, one year of general medical training, then four years of residency (specialty) training in radiation oncology. They have extensive training in the safe use of radiation to treat disease. If they pass a special examination, they are certified by the American Board of Radiology Patients should ask if their doctor is board certified.

Therapeutic Medical Physicist

A therapeutic medical physicist is a qualified medical physicist who works directly with the doctor in treatment planning and delivery. Therapeutic medical physicists oversee the work of dosimetrists and help ensure that complex treatments are properly tailored for each patient. They are responsible for developing and directing quality control programs for equipment and procedures that ensure the equipment works properly. They also take precise measurements of radiation beam characteristics and do other safety tests on a regular basis. Therapeutic medical physicists have doctorates or master's degrees and have completed four years of college, two to four years of graduate school and typically one to two years of clinical physics training. They are certified by the American Board of Radiology or the American Board of Medical Physics.

Radiation Therapist

Radiation therapists work with radiation oncologists. They administer the daily radiation treatment under

the doctor's prescription and supervision. They maintain daily records and regularly check the treatment machines to make sure they are working properly. Radiation therapists go through a two- to four-year educational program following high school or college. They take a special examination and must be certified by the American Registry of Radiologic Technologists. In addition, many states require that radiation therapists be licensed.

Dosimetrist

Dosimetrists carefully calculate the dose of radiation to make sure the tumor gets enough radiation and develop a number of treatment plans that can best destroy the tumor while sparing the normal tissues. Many of these treatment plans are very complex. Dosimetrists work with the doctor and the medical physicist to choose the treatment plan that is best suited to each patient. Many dosimetrists start as radiation therapists, then, with very intensive training, become dosimetrists. Others are graduates of one- to two-year dosimetry programs. The Medical Dosimetrist Certification Board certifies dosimetrists.

Radiation Oncology Nurse

Nurses work with the radiation team to care for patients during the course of treatment. They help evaluate the patient before treatment begins. They may talk to the patient about potential side effects and their management. During the course of radiation treatments, the nurse may evaluate the patient weekly or more frequently to assess problems and concerns. Nurses play a key role in educating the patient about treatment, side effects, etc. Radiation oncology nurses are registered nurses licensed to practice professional nursing. Most nurses in radiation therapy have additional accreditation in the specialty of oncology nursing. Advanced practice nurses in oncology, which include clinical nurse specialists and nurse practitioners, have completed a master's degree program.

Social Worker

Social workers may be available to provide practical help and counseling to patients or members of their families. They can help a patient and family members cope. They also may help arrange for home health care and other services. Social workers may be licensed. Licensed social workers must have a master's degree and pass an examination.

Dietitian

Dietitians work with patients to help maintain nutrition. They monitor the patient's weight and any nutritional problems. Dietitians educate patients and may provide them with recipes and nutritional supplements to improve their nutritional status before, during and after treatment. Dietitians attend four years of college then usually take part in a one-year internship. The American Dietetic Association registers dietitians who have passed a professional examination.

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