

## A Day in the Life of a Radiation Therapist in a CT-Simulation / Mould Room

- 8:30am** Arrive in the department; turn on the computers and work stations within the CT-Simulation area.
- Review the daily schedule, listen to phone messages and process any requisitions for upcoming CT-Simulations.
- 9:00am** Organize treatment records, patient education material and documentation for patients undergoing CT-Simulation today. The late shift therapist arrives at 9:00am and begins to help with the daily tasks.
- Review consultation notes and images found in each patient's electronic medical record or in PACs. We review the patient notes and specifically the diagnosis, treatment site and the intended treatment plan so we may learn about any other medical issues or concerns that the patient may have. This review helps us to provide the best care.
- Start the CT-Scanner warm-up and daily quality control.
- 9:30am** Complete the write-up and documentation on the cases that need to be sent to dosimetry for treatment planning. A significant number of patients need computerized treatment plans. We need to be sure that the CT images, contours, documentation and prescription are accurate and complete. We will consult with radiation oncologist as needed for clarification.
- Complete any contouring / beam placement on the cases from the day before. We spend quite a bit of time contouring a number of organs (eg. bladder, rectum, lung, spinal cord, etc.) on the reconstructed CT images. Although this responsibility may vary from centre to centre, the radiation therapist has the education and knowledge to perform this task. The radiation oncologist is responsible for the accuracy of the contours before the patient receives any treatment.
- Turn on the water bath for the patient with head & neck cancer who requires an immobilization device. Prepare the room for this patient by choosing the appropriate thermoplastic, neck roll, arm pulleys, etc.

11:00am Provide education to the patient and family. This includes a review of process and side effects. During this initial meeting, it is important to communicate clearly and listen to your patient's concerns or questions. This is an important component of your day and is the start of building a good rapport with a patient and their family. In addition, referrals may be made for the patient to see the appropriate health care professionals (dietitian, supportive care, etc.) before or during the patient's radiation therapy treatment. To provide good quality care, I must have a good understanding of other professions' scope of practice as well as my own.

11:30am Work with another therapist to fabricate the immobilization device for this patient. Complete fabrication and document this in the patient treatment record.

12:00pm Catch up time / Lunch

1:00 – 4:15pm Depending on staffing and size of centre, the number of patients who receive CT-Simulation will vary. Typically, each patient will require between 30-45 minutes per appointment.

Working as a team, the radiation therapists will continue to:  
Provide education to patients and family. This includes verbal information and written materials.

Perform CT-Simulation on the patient. This includes choosing appropriate field of view, scan limits, tattooing. We need to be aware of the patient's physical limitations (pain, mobility) and modify patient position as needed.

Start the simulation process in the CT-Simulation software. We mark the patient, contour organs and markers, place beams as necessary.

Perform calculations and documentation for patients who do not need dosimetry planning. This might apply to a patient requiring emergency radiation therapy for a cord compression or superior vena cava obstruction.

4:15pm Shut down the computer work stations. Put confidential patient information away. Lock up area as per department policy.