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## PLANNING RADIATION TREATMENT

Treating a cancerous area with radiation while sparing as much healthy tissue as possible requires very careful planning. To ensure precise and uniform treatments, your radiation therapy treatment team uses a planning process called simulation.

The radiation therapist will greet you and review necessary paperwork prior to starting the initial simulation process. The radiation therapist may make immobilization devices to help keep you still during the treatments. For example, patients undergoing treatment of the head or neck may wear a custom-fitted mesh mask over their face and neck while treatments are administered. These devices should not be uncomfortable. If they are, tell your radiation therapist so that they can be modified. All efforts will be made to make the patient as comfortable as possible, as we want the patient setup to be reproducible to provide the most accurate daily treatment.

Treatment planning imaging routinely takes approximately an 1 hour. A CT scan (Computed Tomography) is obtained with the patient in treatment position and will be used to identify and measure the treatment area. You may be injected with a contrast agent, or asked to drink some contrast to make the cancerous area more clearly visible. Depending upon the area of diagnosis, the Radiation Oncologist may also request a MR (Magnetic resonance) scan be obtained in treatment position. For any scan, the radiation therapist will be present and we ask that you remain still and breathe normally. Temporary marks will be placed on your skin and we ask that the patient keep these marks until they return for their next appointment, the verification simulation.

When you leave from the initial simulation, the radiation therapist will give you a card and explain that you will be contacted regarding your return appointment. Using the Radiation Oncologist's prescription for treatment, the information collected during the initial simulation is entered into a planning computer. The Dosimetrist along with the Radiation Oncologist will work to create the treatment plan as prescribed. This may take several days. Once your plan is ready, you will be scheduled for a verification simulation or "dry-run" where the fields will be identified on your body and images will be captured to reflect the treatment plan. Permanent marks to identify the treatment volume will be applied. Once our Medical Physics staff has completed the Quality Assurance process, your treatments will begin. In some cases, radiation therapy treatments can start the day after simulation. In others, it may be several days before the treatment plan is ready and you can begin treatments.

If you have any questions about treatment planning or any other aspect of your radiation therapy, ask your radiation therapist. He or she is a skilled professional, educated in the safe delivery of radiation for therapeutic purposes.