UW Medicine UNIVERSITY OF WASHINGTON MEDICAL CENTER

Your Radiation Treatment

Information for patients and families

This handout describes what to expect during your radiation treatments, side effects, and who to call with any questions or concerns.

We know that this is a stressful time for you. We will do our best to make your treatment process go as smoothly as possible.

Your First Clinic Visit: Consult

A radiation oncologist is a doctor who has special training in treating cancer with radiation. If you have not already met with your radiation oncologist, you will meet with this doctor at your first visit to talk about using radiation to treat your cancer.

Nurse Visit

You may meet with a registered nurse (RN) on the day of your consult. Or, your nurse visit may take place on the same day as your treatment planning visit (see page 2).

At the nurse visit, your nurse will:

- Ask you about your health history
- Assess any of your health needs that must be monitored while you are having radiation therapy
- Talk with you about possible side effects of your radiation therapy
- Explain how to contact staff in Radiology
 Oncology
- Answer any questions you may have about your treatment



Your radiation consult and nurse visit will be in the Radiation Oncology clinic at UWMC - Montlake campus.

Depending on your treatment, you may also:

- **Answer an IV contrast questionnaire:** If you need *contrast* for the *computed tomography* (CT) scan that will be done during your treatment planning visit, you will fill out this form at the nurse visit.
- Access your port-a-cath: If you have a CT-capable port-a-cath such as a Power Port, bring your ID card or band (or other ID that you received when your port was placed) to the nurse visit. Your nurse can access your port-a-cath for use during the procedure **only** if you bring this information.

Your Treatment Planning Visit

At your treatment planning visit, a special CT scanner will be used to take images of the area or areas where your radiation therapy will be aimed. These images will help your care team plan your treatment. This is called a simulation/planning CT scan.

Simulation/Planning CT Scan

Simulation is the process that helps your care team:

- Determine the position your body needs to be in during your daily radiation treatments
- Make special devices to help you stay in that position
- Take the images we need to plan your customized radiation therapy

You will be asked to lie very still on a table while your doctor and CT/simulation (CT/SIM) therapists locate the exact place to aim the radiation. This "simulates" (is the same as) the position you will be in for your radiation therapy.

You may receive *contrast* to make it easier for the doctor to see inside your body. This contrast may be oral (swallowed), or you may need to receive IV (*intravenous*) contrast. The IV contrast will be delivered through a line in your arm or through a *central line/port-a-cath*, if you have one. Please talk with your nurse about which one will be used for you.

You may be asked to breathe in a specific way to help create the best images. If you need to do this, CT/SIM staff will give you instructions over an intercom.

If your treatment is in the pelvis area, you may need to either empty your bowels OR have a full bladder. Please follow the instructions your care team gave you.

This precise process may take from 30 minutes to 2 hours. Most planning CT scan visits usually last about 1 hour.

You may leave this scan with stickers on your body, as well as marks drawn with permanent pen. These will be used during your treatment to make sure you are in the right position. Please follow the directions of the CT/Simulation staff about keeping these in place until your treatment begins.

Immobilization Devices

The part or parts of your body that will be treated must stay very still during your radiation treatments. At your treatment planning visit, before the CT scan is done, an *immobilization device* will be made to help keep parts of your body from moving during treatment.

Depending on the area of your treatment, you may need more than 1 device. Each device takes about 15 minutes to make.

Please tell your CT/SIM staff if any device is uncomfortable. We will keep your devices in our department until your radiation treatment is complete.

Here are the kinds of immobilization devices that we may use for your treatment:

- **Bite block:** A bite block is like a mold of your teeth that a dentist may make. It holds your jaw in an open position. Bite blocks are often used for patients with tumors in their head or neck. If you need a bite block, you will be referred to a nearby dental clinic to have it made.
- **Mask:** You will need a mask if you are having radiation to your head or neck. The mask will keep your head in exactly the same position each time you receive radiation.
 - To make your mask, a plastic see-through mesh is heated and softened in warm water, then molded over your face. At first, it will feel like a warm, wet washcloth. The mask will harden as it cools and dries. After the mask is formed, it is removed and holes are cut out for your eyes, nose, and mouth.
- **Vacu cradle:** A vacu cradle is like a beanbag. It forms a mold in the shape of your torso, arms, or legs to ensure that you are in the same position every time you have a treatment.
 - To make the cradle, you will lie down or place your affected body part on the bag. As the air is removed from the bag, it hardens to the shape of your body or limb, forming a mold.

Treatment Scheduling

After you are finished with the Simulation/Planning CT Scan, we will give you an appointment time for your daily treatment. Treatment is usually at the same time every visit.

If your appointment time does not work well for you, please tell the radiation therapist at the treatment machine. Different treatment times may be open or become open in 1 or 2 weeks.

At times, your treatment time may need to be changed. If this occurs, we will let you know as soon as we can.

Planning Your Treatment

After your treatment planning visit, your doctors and *dosimetrists* (radiation planning specialists) will work together to create a treatment plan for you. This planning is done on a computer. It usually takes 7 to 10 business days, or $1\frac{1}{2}$ to 2 weeks. If your doctor wants to start your radiation treatment right away, the planning will be done more quickly.

Verification Simulation Day (VSIM)

During this visit, radiation therapists will give you a quick "tour" of the process in the department. They will show you:

- The changing room
- The treatment reception area

Next, you will go to the treatment room (*radiation vault*). Therapists will help place you in your treatment position. We will take low-energy scans called *cone beam CT scans* (CBCTs) or films to make sure the treatment area exactly matches the area that was planned by computer.

The therapists may also mark your skin with permanent "dots" (tattoos). These marks help them line up the radiation beams exactly the same way for each treatment. You may have an "X" drawn over the tattoo with a semi-permanent pen. **Please do not remove these marks unless your radiation therapist tells you to.**

During your treatment, we will take CBCTs daily or films often to make sure your body is in the correct position. These scans only help check your position and do not show the details of body tissues very clearly. It is very rare that we can see the cancer or the results of radiation treatment in these types of imaging.

Treatment Day

Arriving at the Clinic

To protect the privacy of our patients, the treatment reception area is for patients only. But, if you need help getting dressed or walking, one of your caregivers may come with you.

When you arrive for your treatment:

- Check in at the front desk.
- Please check the monitor in the waiting room for any treatment delays.
- Go to the back waiting room area 15 minutes before your scheduled treatment time.
- Follow the instructions you received during your Verification Simulation (see page 4).

In the Radiation Vault

While you are in the radiation vault, the radiation therapists will monitor you at all times. When they are not in the vault with you, they will be able to see you on a closed-circuit TV. You will be able to talk with them through an intercom.

You will be in the radiation vault for 15 to 30 minutes. Much of this time is used to position you and to adjust the position of the machine. The actual radiation treatment lasts only a few minutes.

About Your Treatment Schedule

- It is important for you to receive all of your treatments as prescribed. Please plan your schedule so you can come every day and not miss any treatments.
- If you are going to be late or cannot keep an appointment, please call the clinic right away.
- If you know of a time conflict that you cannot avoid, please tell
 your radiation therapists as soon as you can. They will try to give
 you a different treatment time for that day.
- If you feel you are too sick to come for treatment, please call your nurse. It important that you not miss any treatments.
- Radiation patients are scheduled every 15 to 30 minutes. To help us stay on schedule, please be in the radiation treatment area by your scheduled time every day.

- Please make sure we have your most reliable phone number. We may need to call you and postpone your treatment if:
 - A radiation machine needs repair or service
 - We have an emergency situation with another patient

Members of Your Radiation Care Team

Doctors and Nurse Practitioners

- Your attending doctor in the Cancer Center/Radiation Oncology is a radiation oncologist (a doctor who specializes in treating cancer patients with radiation therapy) and a faculty member of the University of Washington School of Medicine.
- Your **resident doctor** is receiving advanced training in radiation therapy. This doctor rotates to a new service every 3 months, so you may see a new resident or not have one during your treatment.
- **Nurse practitioners**, advanced practice nurses, may also be involved in your day-to-day care while you are receiving treatment.

Your attending doctor is:
Your resident doctor is:
Your nurse practitioner is:
You will see an attending doctor and your care team once a week at your on-treatment visit, called "doctor day." At this weekly visit, a medical assistant will take your vital signs and record your weight. Your doctor will check how your treatment is going and answer any questions you may have. This is your scheduled visit, but you may ask to see your doctor at other times if needed.
Radiation Nurse
The radiation nurse is a link between you and the rest of your care team. Please tell your radiation nurse if there are any changes in how

Radiation Therapists

Your radiation nurse is: _____

Board-certified *radiation therapists* work in teams to run our radiation treatment machines. They provide the actual treatments after your doctor has approved your treatment plan.

you feel and if you have any concerns or questions.

You may see different radiation therapists during your

treatment. Our radiation therapists are on a rotating schedule so that they keep their skills current on all 5 of our radiation treatment machines.

Medical Assistants

Our medical assistants will take your vital signs and weight at least once a week during your on-treatment visit ("doctor day"). They will also help you connect with your care team if you have any questions or problems.

Patient Services Specialists

Patient Services Specialists will greet you, check you in, help with scheduling changes, connect you to your care team, check you out as you leave, make sure you have the right parking validation, and set up follow-up visits or other services as needed.

Care Team Members You May Not See

Other people work behind the scenes to help plan your treatment and make sure it is safe and of the highest quality. They include:

- **Nurse manager.** This nurse is responsible for making sure you receive the best quality care. If you feel that your questions or concerns are not being addressed, you may reach the nurse manager by calling the front desk at 206.598.4100. Ask to be transferred to the nurse manager.
- **Radiation physicists.** These specialists confirm that your radiation treatment plan is safe and the radiation equipment is safe and working correctly.
- **Dosimetrists.** These specialists plan the treatment based on the radiation oncologist's prescribed radiation dose.
- **Patient care coordinators**. These staff members help arrange the consults and planning scans before your radiation therapy starts.

Other Cancer Center/Radiation Oncology Staff

A clinical dietitian can help you assess your eating and help you
find ways to deal with any eating problems that may arise. This
dietitian is a backup to your dietitian at Harborview Medical
Center (HMC) or Seattle Cancer Care Alliance (SCCA). Our staff
will help you connect with our department clinical dietitian as
needed.

• A **social worker** can help you with emotional issues that may arise and help find the resources you may need to help make your treatment go as smoothly as possible. This social worker is a backup to your social worker at HMC or SCCA. Our staff will help you reach our department social worker as needed.

Side Effects

Most times, radiation side effects are limited to the area being treated. At your first visit, your radiation oncologist will talk with you about the side effects that you may have. Your nurse will give you a handout that describes the general side effects for your treatment area. If you have any side effects, please tell your radiation nurse or doctor.

Infections

Call your radiation nurse if you have any of these signs of infection:

- Runny nose, sneezing, or coughing
- Fever higher than 100.5°F (38.1°C)
- Chills
- Body aches
- Rash or shingles
- Diarrhea

Isolation or Precautions

Please call your radiation nurse before you come to the Cancer Center if the staff at HMC or SCCA has placed you in *protective isolation/precautions* or if you have been exposed to chickenpox, shingles, or tuberculosis (TB). The guidelines for isolation at UWMC are the same as the ones at HMC and SCCA.

Emergencies and Urgent Concerns

- If you become ill or have an emergency, come to the UWMC Emergency Department or call 911.
- If you have an urgent concern or question:
 - Weekdays between 8 a.m. and 5 p.m., call our front desk at 206.598.4100 and press 1. Your call will be forwarded to a Patient Services Specialist.
 - After hours and on weekends and holidays, call 206.598.6190 and ask to page the Radiation Oncology resident on call.

Questions?

Your questions are important. Call your doctor or healthcare provider if you have questions or concerns.

Weekdays from 8 a.m. to 5 p.m., call 206.598.4100 and press 1.

After hours and on weekends and holidays, call 206.598.6190 and ask to page the Radiation Oncology resident on call.