Communicating Radiation Treatment to Patients
for University of Chicago Comprehensive Cancer Center
visual communication tool
to aid doctors in explaining radiation therapy,
in hopes of decreasing patient anxiety
Your radiation treatment pathway

Every patient's experience is different. Today, we will discuss what you can expect.

Consult
Simulation scan
Planning
Treatment
After treatment

Understanding radiation therapy

What is radiation treatment?
A treatment that kills cancer in a specific area of the body.

How does radiation treatment work?
Your custom radiation plan will carefully target the cancer and reduce impact on healthy tissue.

How will radiation treatment affect me?
Radiation will hit some healthy tissue, causing side effects. This healthy tissue will repair and rebuild itself after radiation, while the cancer will not. Splitting your radiation into small doses will help your healthy tissue heal in between treatments.

Some of these side effects, like fatigue, will occur during treatment or shortly after. Others, called late side effects, may take months or years to show up.

1 Consult
Discussing radiation treatment, how it will help you, and how to prepare

So, you are having radiation treatment. Right now, there is a lot of information to understand. You might feel overwhelmed.

Meet Jane. Like you, she is about to experience radiation treatment. Her journey will show you what you can expect.

Your care team is here to support you.

Topics to address today

- What is the goal of your radiation treatment?
- What have you heard about radiation? Ask your doctor to clarify if these things will be true in your case.
- What side effects are more likely to occur? Less likely?

Throughout your treatment

- Be aware of how you feel, physically and mentally.
- If you experience any side effects or notice any changes in your health, let us know during your daily visit.
- Your nurse and doctor are available everyday if needed.

DOCTOR
NURSE
RADIATION THERAPIST
DOSEMETRIST/PHYSICIST
Jane talks to her nurse and doctor about her side effects at her first follow-up appointment. After radiation treatment ends, the effects of radiation continue to impact her cancer. You will continue to see your care team at your clinic. They will assess the success of treatment and monitor for side effects.

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Observations & immersive experiences
Research Planning

**Core/content level**
- Best-practice guidelines
- Clear messages, language
- Action steps
- Visual hierarchy + structure

**User needs level**
- Role + responsibilities
- Knowledge needs
- Relevance + value

**Contextual level**
- Supports key interactions
- Fits workflows
- Prompts key conversation + reduces practice variation

**Formal process**
- Medical and procedural information about radiation therapy

**Experiential information**
- Patient and family member experience
- Care team perspective

**Broader context**
- When tool will be used during treatment journey
- How tool should be used in a clinical setting
Primary research

Communication circle exercise

Journey mapping

Radiation onocologists

Nurses

Radiation therapists

Patients and family members
Research Planning

Interview protocol components

**Patients & family members**
- Journey mapping to track anxiety and confusion
- Support circle exercise to understand who or what helped and how

**Medical patient-facing staff**
- Understanding radiation from a medical perspective
- Communication circle exercise to understand clinical context

**Non-medical patient support**
- Understanding radiation treatment from a logistical perspective
- Understanding current resources and information

**Medical backstage staff**
- Understanding radiation treatment from a medical perspective

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1. Medical patient-facing staff
2. Medical backstage staff
3. Non-medical patient support
## Synthesis

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<thead>
<tr>
<th>Treatment activities</th>
<th>Consult</th>
<th>Simulation</th>
<th>Planning</th>
<th>Treatment</th>
<th>Post</th>
<th>Overall process</th>
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<th>What patients need to know</th>
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Moving from insights to action

**Insights**

- Patients have trouble imagining themselves in treatment.
- Current material (at an 11th grade reading level) overwhelms patients with medical jargon.
- Educational materials are 'stacked and never looked at again'.
- Everyone's cancer journey is different, and so is treatment.
- Patients do not understand waiting period before treatment, causing confusion and anxiety.

**Design Principles**

- Patient journey should feel like a story and be easy to follow.
- Text should score near sixth grade reading comprehension.
- Tool needs to look and feel unique.
- Provide areas to customize patient info, textually and graphically.
- Be transparent regarding planning, give patients way to fill the time.

**Final Product**
Prototyping

Form factor

Content strategy

Illustration
Prototyping
1 Consult discussing treatment plan, how it will help you, and how to prepare

2 Simulation scan

3 Planning creating your custom radiation plan

4 Treatment visiting your clinic for radiation

5 After treatment assessing the effects of treatment on the cancer and your body

Understanding radiation therapy
What is radiation therapy?
A treatment that kills cancer in a specific area of the body.

How does radiation treatment work?
Your custom radiation plan will carefully target the cancer and reduce impact on healthy tissue.

How will radiation treatment affect you?
Radiation will change your body. Your healthy tissue will repair and rebuild itself after radiation, while the cancer will not. Keeping your radiation into small doses will help your healthy tissue heal between treatments.

Some of these side effects, like fatigue, will occur during treatment and after. Others, called late side effects, may take months or years to develop.

Your radiation treatment pathway
Every patient’s experience is different. We will always discuss your treatment with you.

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In the image above, Jane is about to have her first simulation visit. She will work with her care team to discuss the treatment plan and any effects that may occur.

What is radiation treatment?
A type of cancer treatment that uses high-energy radiation to kill or stop the growth of cancer cells.

How does radiation treatment work?
Radiation treatment is used to treat various types of cancer, including breast, lung, and prostate cancer. It can be used as a primary treatment or in combination with surgery, chemotherapy, or other treatments.

How will radiation treatment affect you?
Radiation treatment can cause side effects, such as fatigue, skin reactions, and hair loss. However, these side effects are usually temporary and will improve over time.

Some common side effects of radiation treatment include:
- Fatigue
- Skin reactions
- Hair loss
- Nausea and vomiting
- Diarrhea
- Bladder and bowel problems

Examples of late effects of radiation treatment include:
- Bone fractures
- Kidney failure
- Gastrointestinal problems

Your care team will discuss the potential side effects of your treatment and provide ways to manage them.

For more information about radiation therapy, please visit the American Cancer Society or the National Cancer Institute.

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