

Radiation Therapist interview questions

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What to expect

Interviews for Radiation Therapist roles in Australia typically assess your clinical competence, safety awareness, and ability to work within a multidisciplinary team. Expect a mix of technical, behavioural, and scenario-based questions, often followed by a tour of the department or a practical assessment.

- **Technical:** Questions that probe your knowledge of treatment delivery, simulation, planning systems, and equipment operation.
- **Safety:** Questions about radiation safety, quality assurance, and adherence to protocols for patients and staff.
- **Behavioural:** Questions asking you to describe past experiences, especially in patient care, teamwork, or handling difficult situations.
- **Scenario:** Hypothetical situations that test your judgement, problem solving, and ability to prioritise under pressure.
- **Patient-facing:** Questions on communication, empathy, and health education for patients undergoing treatment.

The process usually starts with a phone screen or initial interview with a chief radiation therapist or department manager. This is followed by a panel interview that may include a radiation oncologist, medical physicist, and senior therapist. Some employers include a practical simulation or treatment planning task, and you might be asked to meet the wider team. Final offers often follow reference checks and verification of AHPRA registration.

1. Walk me through your process for performing a CT simulation for a patient receiving head and neck radiotherapy.

Why they ask

This assesses your technical knowledge, patient care, and ability to follow a structured process for a complex treatment site.

How to structure your answer

Use a step-by-step walk-through: start with preparation, then positioning, immobilisation, contrast, scanning, marking, and documentation. Mention how you involve the patient and confirm their identity and consent.

Example answer

"First, I review the referral and any previous imaging to understand the target volume and organs at risk. I explain the procedure to the patient, answer questions, and confirm their identity and consent. In the CT room, I position the patient supine with appropriate head and neck immobilisation, using a thermoplastic mask and supports to ensure reproducibility. I then apply contrast if required and perform the scan, marking the treatment area on the patient's skin as directed by the oncologist. I document the setup instructions and images in the oncology information system, and I check that the patient is comfortable before they leave."

2. What steps do you take to ensure radiation safety for yourself, the patient, and colleagues during treatment delivery?

Why they ask

Safety is paramount in radiation therapy, and employers need to know you prioritise it over speed.

How to structure your answer

List key safety checks and protocols, then explain why each matters. Cover patient identification, equipment checks, shielding, monitoring, and emergency procedures.

Example answer

"I begin by verifying the patient's identity using two identifiers and confirming the treatment plan matches the prescription. I check that the linear accelerator has passed its daily quality assurance tests and that all safety interlocks are functioning. During treatment, I monitor the patient via camera and intercom, and I use lead shielding where appropriate for staff protection. I also ensure that only authorised personnel are in the control area and that radiation warning signs are visible. If any discrepancy arises, I stop treatment immediately and follow the departmental protocol for reporting and resolution."

3. Tell me about a time you had to manage a distressed or anxious patient during treatment.

Why they ask

This behavioural question reveals your empathy, communication skills, and ability to adapt under pressure.

How to structure your answer

Use STAR: describe the situation, the task, the action you took, and the result. Focus on how you calmed the patient and maintained treatment accuracy.

Example answer

"A patient with claustrophobia became very anxious during her first treatment for lung cancer, and she began to hyperventilate. My task was to help her complete the session safely. I paused the treatment, spoke to her calmly, and explained each step before we resumed. I offered her a cold cloth and adjusted the room lighting to make the space feel less enclosed. I also arranged for a longer appointment the next day so we could take breaks without rushing. She completed all her fractions, and she told me later that the extra time and reassurance made a big difference."

4. You notice a discrepancy between the prescribed dose in the treatment plan and the dose set on the linear accelerator. What do you do?

Why they ask

This scenario tests your judgement under pressure, your commitment to safety, and your understanding of escalation procedures.

How to structure your answer

Use a judgement-under-pressure structure: stop, verify, escalate, document, and follow up. Emphasise that patient safety comes first and that you never proceed with an unresolved discrepancy.

Example answer

"I would stop treatment immediately and not deliver any dose. I would double-check the prescription in the oncology information system against the parameters set on the machine, and I would confirm the patient's identity and plan. If the discrepancy remains, I would escalate to the radiation oncologist and medical physicist on duty, following the departmental incident reporting protocol. I would document the event clearly, including the time and what was found. After the issue is resolved and sign-off is given, I would proceed only when confident that the correct dose is set. I would also participate in any review to prevent a similar issue."

5. How do you approach treatment planning review with the radiation oncologist and medical physicist?

Why they ask

This process question assesses your collaboration skills and understanding of the multidisciplinary workflow.

How to structure your answer

Walk through the steps: review simulation images, discuss target volumes and organs at risk, use planning software to generate a plan, evaluate dose distribution, and iterate until consensus is reached.

Example answer

"I start by reviewing the simulation CT with the oncologist to confirm the target volumes and organs at risk. Using Varian Eclipse, I create a preliminary plan and then meet with the oncologist and physicist to review dose coverage and constraints. We discuss any trade-offs, such as sparing the parotid glands versus covering the target adequately. If adjustments are needed, I make them and we review again. Once everyone agrees, the oncologist approves the plan and I document the final parameters in ARIA before the first treatment."

6. How do you explain radiation therapy side effects to a patient who is about to start treatment?

Why they ask

This client-facing question evaluates your health education skills and ability to communicate complex information with empathy.

How to structure your answer

Use a clear, empathetic explanation: describe common side effects, when they might occur, what to do, and when to seek help. Check the patient's understanding and provide written resources.

Example answer

"I begin by asking what the patient already knows and what concerns they have. I then explain that side effects depend on the treatment area, and I describe the most likely ones, such as skin redness or fatigue, in plain language. I tell them when these might start and how long they usually last. I give practical advice, like using a gentle moisturiser and avoiding sun exposure, and I emphasise that most side effects can be managed. I also explain who to contact if symptoms worsen. I check that they have understood by asking them to repeat back the key points, and I provide a written information sheet."