

Radiation safety and communication



Synopsis

Radiation Therapy and Medical Imaging departments pose many potential risks to the health professionals working within or travelling through them. Staff who are unfamiliar with the radiation environment may not be aware of the safety protocols that they should be following. A large focus of this simulation is on effective team communication. Appropriate communication within the radiation environment is vital in order to ensure that the radiation/imaging staff are not distracted while providing treatment and that the patient receives the prescribed treatment/procedure. Sound communication will ensure that the environment remains safe for both the patient and other professionals working within the area. Participants will learn of the link between the two. This simulation can be conducted in a multi-purpose room, a simulation centre or a live radiation environment. It can be individually and co-facilitated and is easily attached to an orientation program.

Learning Objectives

By the end of the simulation, participants will be able to:

1. Identify the key safety aspects involved with working in a radiation area
2. Demonstrate the appropriate communication required when dealing with radiation therapists delivering patient treatment
3. Demonstrate safe conduct in a radiation area
4. Manage a highly distressed patient in a radiation area (radiation therapy students only).

Target Audience

The simulation has been written to include qualified health professionals of any experience level from disciplines such as physiotherapy, occupational therapy, dietetics, speech pathology and social work whose daily routine may cause them to travel through a Radiation Therapy or Medical Imaging department in the course of treating their patients. Not all disciplines have been included in this scenario; however disciplines can be added or subtracted depending on local needs. It can also be used to educate radiation therapy students during an orientation session and/or skill development session. While this simulation has been written for use in a radiation therapy environment, the scenario can be adapted depending on the learners' needs. For example:

- The simulation could be easily adapted to suit diagnostic radiography or nuclear medicine contexts.

Radiation safety and communication

Simulation activity

The simulation will take place in the context of a radiation therapy bunker. Participants will take turns to enter into the simulated radiation environment. The participants who are not actively involved in the simulation will act as observers who will keep an eye out for safety procedures which were either observed or not observed. Each participant will have a scenario relevant to their respective discipline. Each scenario will involve the participant and one or more radiation therapists who will be actively treating a patient. When particular breaches to safety protocol occur, alarms may activate as they would in the radiation environment.

It is expected that participants observe the signs in the radiation environment, conduct themselves in a safe manner, make determinations as to when it is safe/not safe to enter the environment and make determinations as to when/how to communicate with the staff in the radiation environment. The information and skills required to perform these tasks will be presented in the education session preceding the simulation activity.

An additional scenario for radiation therapy students on clinical placement provides an opportunity for students to manage a situation whereby an anxious patient becomes very distressed in the treatment room.

Following each simulation a short discussion may be facilitated around safety procedures observed and not observed before the next simulation commences. Participants then engage in the debriefing following the simulation.

Radiation safety and communication

Duration 60 minutes

Faculty 1 x Facilitator
2 x Confederates (Radiation Therapists)
1 x Simulated patient

Participants Qualified health professionals or students on clinical placement.

Authors Natalie Coburn Radiation Therapy Educator, Western Sydney LHD
Kim Faulkner Radiation Therapy Educator, Central Coast LHD
Melanie Rennie Radiation Therapy Educator, South Western Sydney LHD
Craig Slater Senior Program Officer – Allied Health Portfolio, HETI
Daniella Pfeiffer Senior Program Officer – Allied Health Portfolio, HETI



Educators and clinicians who would like to offer this simulation can access the complete package on the **HETI website**. Supporting documentation includes:

- Simulation Template
- Facilitator Session Plan
- PowerPoint Presentation
- Simulation Activity Running Sheet
- Participant Briefing Notes – Health Professional
- Participant Briefing Notes – Radiation Therapy Student
- Confederate Briefing Notes – Radiation Therapist
- Simulated Patient Briefing Notes

Facilitators can print off copies and distribute the relevant documentation to faculty and participants.

Radiation safety and communication

