

Portfolio Guidance Notes

The RCT Evidence Criteria – Radiation Physics

In order to demonstrate to The RCT assessment panel that you are working at a sufficient level, it is necessary to produce a portfolio of evidence detailing how you meet each of the standards. Not everyone will have first-hand experience of every aspect and in these cases you will need to demonstrate an understanding of the subject in lieu of being able to present first hand evidence. First hand evidence is however preferential and in many cases without this you may not meet the requirements for entry.

To assist you with the production of your evidence portfolio further the RCT has given examples of the types of evidence which could be seen as acceptable for each of the criteria, details of which are below.

A. Safe Working Practice

1. Provide evidence that you are competent with a range of generic skills including mandatory training e.g. infection control and basic life support.
 - Explain how health and safety affects your day to day role.
 - Provide details on infection control measures you adhere to when working with equipment in clinical areas.
 - Show you have completed your mandatory infection control, life support and manual handling training and explain how this relates to your work.
2. Demonstrates an understanding and application of health and safety and risk management in all aspects of the Clinical Technologists role.
 - Can you demonstrate how your local health and safety policies cover your work, or show an understanding of the risks around working in a clinical setting/lone working? Can you provide evidence how you meet these requirements in your day to day role?
 - Show you have completed your mandatory health and safety training and explain how this relates to your work.
3. Demonstrates an understanding of, and works within, all relevant legislation to their role including departmental local rules.
 - Can you identify relevant legislation which governs your role? Are you able to identify the roles of others such as radiation protection advisers, COSHH assessors or manual handling facilitators?
4. Perform health and safety risk assessments (including radiation risk assessments for ionising and non-ionising radiation) in accordance with standard operating procedures.
 - Have you performed any risk assessments? If not you may need to learn how to do one and carry out a range of assessments covering several aspects of your role. These may include COSHH, decontamination, moving and handling or radiation risk assessments.
 - If you are unable to perform a risk assessment you could review one already carried out and comment on its suitability and how it applies to the workplace.

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5. Demonstrates an understanding of radiation incident reporting.
 - Are you involved with reporting or investigating incidents? Provide either evidence that this is part of your role or demonstrate an understanding of the processes involved.
6. Demonstrates effective communication skills and team working.
 - Can you demonstrate who you communicate with in your daily role and how your team working benefits the service?
7. Demonstrates a professional approach to all aspects of the Clinical Technologists role.
 - Provide evidence to show how you have dealt with challenging situations in a professional manner.
 - Describe how you work on a day to day basis in a professional manner, how do you comply with patient confidentiality, governance issues.
 - Do you have any direct feedback from service users, via patient satisfaction surveys or thank you cards?
8. Observes and assists in a range of procedures within the Radiation Physics discipline e.g. Radiation equipment quality assurance and optimisation, patient dosimetry and personnel monitoring. Adhering to standards of professional practice throughout.
 - Give examples of times when you have assisted other members of your department. What was the extent of your role?
9. Assists in giving instructions to patients and colleagues regarding radiation hazards, doses and restrictions.
 - Can you give examples where you have been involved with the provision of radiation protection advice?
 - How do you recognise when advice needs to come from elsewhere, e.g. an RPA?
10. Demonstrates reflective practice as part of the learning process.
 - Provide evidence of reflective practice and how this has changed your technique or how you carry out a specific task.

B. Equipment Management

1. Assists in the procurement of equipment, accessories or consumables.
 - Show that you are involved in the procurement of consumables or have had some input into the procurement process for a new piece of equipment.
2. Demonstrates the use of an equipment inventory system.
 - Describe the system you use to keep track of equipment (both equipment that is used by your department, and equipment that you test for others).
 - What information do you need to include on the inventory? Whose responsibility is it to keep this up to date?

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3. Performs cleaning/decontamination of equipment.
 - Explain how you clean equipment prior to and after use. Do you have any records of this which you can provide?
 - What steps do you take when equipment is found to be unclean or contaminated?
4. Performs routine equipment quality control checks and review and interpret results.
 - Explain what quality control checks you do and how you determine if the equipment is safe for use.
5. Performs a range of fault finding and first line user maintenance.
 - Explain the procedure you follow if a piece of equipment is out of specification/faulty and what you would do?
6. Demonstrates knowledge of radioactive source management, transport and disposal.
 - Outline how your department manages their radioactive sources. Do you perform any checks on their integrity or activity?
 - How do you dispose of radioactive material? What records do you keep and what legislation are you complying with?
 - What is your role in this process?
7. Demonstrates an understanding of quality management systems.
 - Do you work under a Quality Management System? If so, what is your role in maintaining it? How are your procedures affected by the QMS? What benefit do you gain from it?
 - If you don't have a Quality Management System, show that you understand what the process entails and how it might affect processes within your department.
8. Perform equipment life-cycle procedures as an equipment user.
 - Give an example of the life cycle of a piece of new equipment, from purchase to disposal.
 - Show how you demonstrate that the equipment remains fit for purpose and safe for users/patients.

C. Radiation Transport and Dosimetry

1. Performs source checks and completes all relevant paper work prior to transport.
 - Outline the checks which are carried out on all radioactive sources prior to transport.
 - What paperwork is required? What documentation does the driver need?
 - Provide evidence of how you complete this.
2. Perform 'leak' tests, review results and take appropriate action.
 - Describe the procedure for performing leak tests and provide documentation that you have done them.
3. Perform contamination checks and maintain appropriate records.
 - Provide evidence of contamination monitoring you complete

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4. Assist in the issuing, processing and reporting of personal dosimetry across a range of dosimeters.
 - Describe the process for issuing a dosimeter to a new member of staff.
 - If you provide an in-house dosimetry service explain how the dosimeters are processed and how you interpret the results.
 - What do you do with the results? Explain any action levels that you adhere to when results are higher than expected.
5. Assist with the record keeping associated with personal dosimetry.
 - What records do you keep and how are they stored?
 - Show that you understand the legal implications of the records (e.g. which records have to be stored for longer, what information has to be retained).

D. Radiation Physics/Protection

1. Performs routine QA checks and radiation surveys (including environmental monitoring) on a range of facilities, equipment and associated secondary equipment.
 - Describe the routine tests you perform on each type of survey. How do you report the results back to the customer?
 - What action do you take when results fall outside of the expected range?
2. Assists with commissioning and critical examinations on a range of equipment and associated secondary equipment.
 - How do these tests differ from the routine checks described above? What additional tests do you perform at commissioning?
 - Can you explain the legal implications of 'critical examinations' and explain how these differ from 'commissioning tests'?
3. Assist with routine testing of radiation protection equipment.
 - Give examples of the type of radiation protection equipment that might be tested. How would you determine if it is fit for purpose?
4. Performs a full range of radiation measurements using appropriate measuring devices.
 - Describe the equipment and method that you use to perform these measurements. How do you determine which is the most appropriate measuring device to use?
 - Provide detail of measurements you perform for each survey type and how you determine if the results are within the expected range.
5. Perform the calibration of a range of diagnostic and contamination measuring devices in accordance with standard operating procedures. Review and interpret results making appropriate adjustments where necessary and produce a range of reports relevant to the activity.
 - Describe the different calibration methods required for different types of device. How do you show that the meter's performance remains fit for purpose?

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6. Assist in the provision of personnel dosimetry devices.
 - Describe your role in the provision of personnel dosimetry. Give examples of the different types of dosimetry devices used on your site.
 - Do you keep any records of dosimetry results for your service users? Do you have a procedure to follow when results are higher than expected?
7. Assist in patient dosimetry/dose surveys and dose optimisation for a range of equipment.
 - Provide evidence of dose surveys that you have completed. Have any of these resulted in an optimisation process? If so what did you do?
 - Provide evidence of any other dose optimisation you have participated in, for example after commissioning new equipment.

E. Good Scientific Practice

1. Adhere to relevant standards of professional practice as defined in Good Scientific Practice. Demonstrate that you have read, understood and comply with this document in all aspects of work.
 - Good Scientific Practice is a document written by the Academy of Healthcare Science, a copy of which is available on the Academy for Healthcare Science website.
 - This document sets out the principles and values expected of the Healthcare Science workforce.
 - Demonstrate how you have the ability to recognise your own limits of technical expertise and use professional judgement in all aspects of clinical and technical practice.

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