



National practitioner-level competencies for radiographers working in CT practice in the UK

First edition

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First edition

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We will invite members to provide feedback on use of the CT competencies framework in clinical practice separately, as part of a pilot study to assess the impact of this resource.

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Introduction

The Society of Radiographers (SoR) CT Advisory Group (CTAG) has developed these national professional competencies to support the consistent application of theoretical and practical training, and to reduce unwarranted variation in the assessment of competence of radiographers working in CT. CTAG is an appointed SoR membership committee of recognised expert radiographers from education and the clinical CT workforce.

The *Quality Standard for Imaging (QSI)*¹ requires and *Principles of Safe Staffing for Radiography Leaders*² recommends that a competency framework is in place for defining roles and tasks within a service.

The competencies framework defines what adequate training means in relation to working as an operator or practitioner duty holder at radiographer practitioner level in CT and as required by The Ionising Radiation (Medical Exposure) Regulations.^{3,4} Alongside formal education it supports duty holders to fulfil the requirements of schedule 3 of The Ionising Radiation (Medical Exposure) Regulations 2017.³

The framework is built upon existing research reflecting priorities for technical competencies required during an individual's early career in CT.⁵ They align with professional best practice guidance. Alongside the practitioner-level

education and qualification requirements and the knowledge, skills and attributes set out in the Education and Career Framework (ECF) for the Radiography Workforce (fourth edition),⁶ they reflect the minimum requirements of adequate training, including theoretical knowledge and practical experience for anyone working in CT.

This evidence-based framework complements existing formal education pathways. It represents a benchmark for practical training in CT. It requires employer assessment and agreement that an individual has reached a safe and effective level of skills and knowledge relevant to their specific CT environment and scope of practice.

The competencies framework recognises that radiographers enter CT with a range of prior radiography experience, from minimal pre-registration exposure to post registration radiography experience in other roles. The competencies framework can therefore be used by early career radiographers and experienced radiographers new to CT.

Radiographer duties and responsibilities may vary depending on the scope and complexity of the CT service. The framework facilitates flexibility in assessing competence within a variety of service delivery models, but it is expected that, as a minimum, all radiographers working in CT will have

met the practitioner-level outcome measures relevant to the local service. Where specific services are unavailable for assessment, for example interventional CT, individuals would not be expected to demonstrate competence in managing those procedures.

The framework is applicable to services of varying sizes operating a variety of staffing models in both the NHS and independent sector in the United Kingdom. It can be used by chief executive officers and senior managers to understand, plan and deliver safe and effective services, by service leads managing education and training, and by individuals considering their lifelong professional and technical development in CT.

The framework can be used to assure patients and the public by providing *QS*¹ evidence on the quality and equity of radiographer training in UK CT services. It provides a standardised employer record of the knowledge base of the CT workforce, reduces the potential for training inconsistencies and risk of harm, and supports the delivery of safer high-quality patient outcomes.

Services implementing the competencies framework are encouraged to feedback their experiences to the SoR via a voluntary pilot study which will be established to measure the impact of the framework.

The background and supporting information behind the development of the competencies framework is available in the supporting publication ***Explanatory guidance; Using the national practitioner-level competencies framework for radiographers working in CT practice in the UK.***

How to use the framework

1. For each competency domain, e.g. Radiographic knowledge, the competency statement describes what the individual is expected to be able to do and the knowledge, skills and attributes they are expected to demonstrate.
2. The outcome measure indicates whether the individual has met those expectations. The supporting evidence is used alongside the outcome measure to verify competence. Outcome measures should be assessed using locally agreed methods undertaken by adequately trained staff. Anyone working in CT as an autonomous practitioner (i.e. not a trainee) should, as a minimum, meet the outcome measures relevant to their role.
3. Employers must be satisfied that the individual can perform within each competency domain to the standard expected. It is the individual's and the employer's responsibility to ensure a person's competence is appropriate for the role they undertake.
4. Employers and assessors should ensure adequate evidence of theoretical knowledge and practical experience is recorded prior to an individual being assessed as competent.
5. Examples of the types of evidence that might support assessments are suggested in the 'Radiographic knowledge' domain, but these can be applied across all domains. Key performance indicators could also be used as evidence. Examples are intended for illustration only. Employers should clearly define what constitutes sufficient proof that the person has been adequately trained.
6. Documented evidence should support and reflect direct observation, assessment and case-based discussions.
7. Evidence should be appropriate to the responsibilities, skills and knowledge relevant to the role as well as the individual's formal professional and educational achievements across the four pillars of radiographic practice.
8. Assessors should be appropriately trained and act fairly, impartially and without bias, discrimination or prejudice. Employers should consider how they assess and document the competence of assessors working in CT.

9. For larger services, a virtually run competency panel could be developed to support on-site technical assessments. The panel should consist of appropriately trained, educated and experienced CT radiographers, medical physics experts, and practice educators. A panel offers a practical solution to busy departments with a high turnover of staff or small or geographically isolated services with fewer appropriately trained staff. Assessment could be integrated into a local preceptorship programme.
10. It is important to note that while capabilities are often transferrable between employers, technical skills require re-assessment to meet the requirements of IR(ME)R. An individual could therefore provide their competency record to a new employer as evidence that they meet a standard for the practice level required but should expect to undertake additional training and assessment on any new or unfamiliar equipment.
11. Individuals should be supported to attain all outcome measures before being expected to undertake the full range of responsibilities of the practitioner role in CT. Where an individual is unable to demonstrate the required competencies to work in the CT environment despite appropriate training and reasonable support, local policies should facilitate more appropriate use of their skills. When things go wrong, reflection by practitioners at all levels should be fundamental to the practice of radiographers. A robust learning and service-improvement process should be mandated by the employer.

Radiographic knowledge

Competency statement

Registered radiographer.

Educated, trained and assessed as competent to work as an autonomous practitioner in CT.

Entitled by the employer to act as an IR(ME)R Operator in CT.

Meets or exceeds the requirements of adequate training, including theoretical knowledge and practical experience (IR(ME)R Schedule 3) relevant to diagnostic or therapeutic radiography.

Outcome measure

Describes the role, responsibilities and scope of practice of a registered radiographer working in CT, including employer entitlement to act as an IR(ME)R Operator. Covers the four pillars of radiographic practice relevant to role.

Assessor initials:

Date:

Applies foundational theoretical and practical CT knowledge to work safely as an autonomous practitioner. **Understands** and meets HCPC standards and develops reflective, ongoing professional development.

Assessor initials:

Date:

Explains employer entitlement, adequate training requirements and IR(ME)R Schedule 3 expectations relevant to CT practice. **Understands** their limitations and works within a written scope of entitlement issued by the employer for the work they undertake in CT.

Assessor initials:

Date:

Demonstrates safe autonomous CT practice by **applying** foundational radiographic knowledge, including image acquisition principles and radiation safety within the employer's required scope of practice.

Assessor initials:

Date:

Identifies and articulates their own developmental needs to support progression to enhanced practice.

Assessor initials:

Date:

Radiographic knowledge

Competency statement

➤ Meets *The standards of proficiency for radiographers* set by the HCPC.

Meets the HCPC *Standards of continuing professional development* (see CPD competencies).

Outcome measure

Demonstrates understanding and meets the minimum requirements of *The standards of proficiency for radiographers* set by the HCPC that are relevant to the role.

Assessor initials:

Date:

Undertakes and **demonstrates** reflective practice and continuing professional development in CT and radiation safety as a minimum.

Assessor initials:

Date:

Radiographic knowledge

Evidence


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supporting
evidence
here

- A certificate equivalent to diagnostic or therapeutic radiography pre-registration education at FHEQ level 6/ SCQF level 10 issued by an institute or person competent to award degrees or diplomas, or to provide other evidence of adequate training.
- Registration as a diagnostic or therapeutic radiographer with the Health and Care Professions Council.
- Employer verification for meeting The standards of proficiency for radiographers set by the HCPC.
- Successful completion of a period of preceptorship.

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

CT-specific radiographic skills

Competency statement

Demonstrates how the physical principles of ionising radiation apply to CT including interaction with matter, biological effects (stochastic and deterministic), image quality and dose in the context of adult and paediatric exposures.

Understands operational and performance system variables between CT equipment suppliers.

Analyses operational and performance system variables between CT equipment suppliers.

Outcome measure

Describes the physical principles of ionising radiation in CT (interaction with matter; stochastic/deterministic effects) and explains their impact on image quality and dose.

Assessor initials:

Date:

Demonstrates sound understanding of the use of Hounsfield units (HU) as relevant to CT and clearly **explains** how to **apply** image display principles (window width/level).

Assessor initials:

Date:

Identifies and correctly **applies** core scan parameters (kV, mA, rotation time, pitch, collimation, slice thickness) appropriate to patient factors and clinical indication.

Assessor initials:

Date:

Considers the impact of tube and detector array and dose in relation to the patient's position and clinical condition.

Assessor initials:

Date:

Demonstrates knowledge and understanding of equipment weight limit, gantry aperture dimensions, table travel length, image display, and window width and level.

Assessor initials:

Date:

CT-specific radiographic skills

Competency statement

Demonstrates how the physical principles of ionising radiation apply to CT including interaction with matter, biological effects (stochastic and deterministic), image quality and dose in the context of adult and paediatric exposures.

Understands operational and performance system variables between CT equipment suppliers.

Analyses operational and performance system variables between CT equipment suppliers.

Outcome measure

Explains vendor/system differences at a basic level and works within employer entitlement and scope of practice to operate local equipment safely.

Assessor initials:

Date:

Applies available dose-reduction technologies (e.g. AEC, organ dose modulation, iterative reconstruction) to keep exposures ALARP.

Assessor initials:

Date:

Understands the need for particular attention in relation to exposures of children.

Assessor initials:

Date:

Understands Standard Operating Procedures (SOPs) relevant to CT and **applies** correct use of ancillary equipment (injectors, monitors, pumps).

Assessor initials:

Date:

Understands how to **apply** standard protocols and **adapt** these, where appropriate, for individual patient factors, such as patient age, habitus, metalwork, artefact risk, position, etc. while maintaining diagnostic image quality and optimised dose.

Assessor initials:

Date:

CT-specific radiographic skills

Competency statement

Works as part of a multidisciplinary team (MDT).

Outcome measure

Describes the roles and responsibilities of key MDT members in CT (e.g. radiologists, nurses, anaesthetists, surgeons, porters).

Assessor initials:

Date:

Applies clear and considerate communication within the MDT to support safe patient management.

Assessor initials:

Date:

Follows recognised workflows for patient safety during interventional or emergency procedures.

Assessor initials:

Date:

Supports learning for students, assistant practitioners (APs) and new staff during MDT activity.

Assessor initials:

Date:

Documents decisions where deviations from normal practice occur and escalates appropriately.

Assessor initials:

Date:

CT-specific radiographic skills

Competency statement

Understands and can identify cross-sectional anatomy in multiple planes.

Outcome measure

Recognises and **identifies** key anatomical structures in axial, coronal and sagittal planes for common CT examinations across all ages.

Assessor initials:

Date:

Describes anatomical orientation and **applies** this understanding to correctly interpret image planes and patient positioning.

Assessor initials:

Date:

Applies basic knowledge of cross-sectional anatomy to ensure accurate patient alignment and protocol execution.

Assessor initials:

Date:

Follows instruction during interventional and emergency cases, using anatomical knowledge to support safe, accurate patient and equipment positioning.

Assessor initials:

Date:

CT-specific radiographic skills

Competency statement

➤ **Manages CT workflow.**

Outcome measure

Identifies patients in terms of clinical priorities and **applies** local procedures to schedule examinations appropriately.

Assessor initials:

Date:

Communicates expected delays to patients and clinicians using clear, respectful language.

Assessor initials:

Date:

Applies workflow instructions to maintain safe and timely progression of patients through CT.

Assessor initials:

Date:

Recognises when competing clinical priorities require escalation and **follows** the appropriate escalation route.

Assessor initials:

Date:

Accurately updates patient and clinical information to support smooth workflow and effective handovers.

Assessor initials:

Date:

CT-specific radiographic skills

Evidence


Signpost
supporting
evidence
here

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Equipment operation

Competency statement

Equipment operation, including image acquisition, storage and transfer

Checks and positively confirms accurate acquisition, storage and transfer of image data.

Outcome measure

Identifies essential patient, examination and anatomical labelling requirements and **applies** correct data-entry procedures during acquisition.

Assessor initials:

Date:

Verifies patient identity, orientation, date, time and clinical details before confirming image acquisition.

Assessor initials:

Date:

Applies local procedures for storage and transfer of image data, ensuring accuracy and completeness.

Assessor initials:

Date:

Follows employer guidance to clarify inadequate information and **initiates** manual entry protocols during system downtime.

Assessor initials:

Date:

Recognises labelling errors or missing data and takes appropriate first-line corrective and reporting action.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ Safely operates the table, gantry and accessory equipment including positioning the patient and initiating the scan.

Outcome measure

Demonstrates safe and accurate operation of gantry, table and accessory equipment, ensuring environmental safety during scans. **Applies** safe operating procedures to protect the patient and staff when moving the table.

Assessor initials:

Date:

Positions patients accurately according to protocol and **confirms** alignment relative to the isocentre.

Assessor initials:

Date:

Explains procedure steps to the patient and **ensures** they understand breath-hold or stillness instructions.

Assessor initials:

Date:

Recognises potential risks related to poor positioning and **adjusts** patient setup accordingly.

Assessor initials:

Date:

Initiates the scan safely within scope of practice, following exposure parameters or advice from senior staff.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ **Appropriate use of emergency exposure pause.**

Outcome measure

Understands the difference between shutting down and pausing the scan and is able to initiate both appropriately. Appropriately executes responsibilities under the fault log procedure and seeks advice about when to stop scanning. **Identifies** situations where each is required.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ Powers up and shuts down equipment safely and appropriately.

Outcome measure

Identifies and **follows** safe procedures for powering up, operating and shutting down CT and accessory equipment during normal working conditions and in the event of an emergency. **Understands** how to reinstate the service after shut down.

Assessor initials:

Date:

Recognises common system errors or interlock warnings and applies appropriate first-line actions.

Assessor initials:

Date:

Applies correct labelling, data entry and patient-selection steps to ensure accurate and safe image acquisition and storage.

Assessor initials:

Date:

Applies local procedures for image transfer, data protection and emergency manual entry during IT downtime.

Assessor initials:

Date:

Equipment operation

Competency statement

Quality Assurance

Complies with duties relevant to the role as required by the employer's quality assurance programme.

Outcome measure

Describes the purpose of the employer's QA programme and **identifies** duties relevant to own scope of practice.

Assessor initials:

Date:

Applies local QA procedures consistently and keeps accurate records.

Assessor initials:

Date:

Maintains awareness of updates to QA guidelines and **adheres** to changes in practice as directed.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ **Recognises and acts appropriately in the event of failures, faults and errors.**

Outcome measure

Recognises common equipment failures, artefacts, error messages or data-transfer issues during CT examinations.

Assessor initials:

Date:

Describes standard reporting and escalation procedures and **applies** them appropriately when faults are detected.

Assessor initials:

Date:

Follows local guidance to safely pause or discontinue scanning when necessary to protect patients and staff.

Assessor initials:

Date:

Documents faults, errors or near misses accurately and in a timely manner.

Assessor initials:

Date:

Applies basic troubleshooting steps within own scope of practice and escalates issues that fall beyond it.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ Performs calibration and quality control tests and initiates action as required.

Outcome measure

Identifies the purpose of routine calibration and QC tests and **describes** how they ensure safe and consistent scanner performance.

Assessor initials:

Date:

Applies local procedures to carry out recommended QC tasks (e.g. warm-up checks, detector checks, image uniformity tests) accurately and on schedule.

Assessor initials:

Date:

Recognises out-of-tolerance results and **reports** them promptly to senior staff following local escalation protocols.

Assessor initials:

Date:

Documents QC results clearly and **maintains** accurate records in accordance with departmental requirements.

Assessor initials:

Date:

Follows guidance on when to remove equipment from use and **seeks** appropriate advice when unsure.

Assessor initials:

Date:

Equipment operation

Competency statement

➤ **Actively engages with Quality Standards for Imaging (QSI), Quality Standard for Imaging Networks (QSIN) and other national quality marks.**

Outcome measure

Describes the purpose and principles behind QSI, QSIN and other national quality marks.

Assessor initials:

Date:

Identifies how individual practice contributes to meeting local quality-standard requirements.

Assessor initials:

Date:

Applies departmental procedures that support compliance with relevant quality standards.

Assessor initials:

Date:

Participates in audits, evaluations or data-collection activities as requested.

Assessor initials:

Date:

Recognises when practice deviates from quality expectations and reports concerns appropriately.

Assessor initials:

Date:

Equipment operation

Evidence


Signpost
supporting
evidence
here

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Meets professional and regulatory standards of conduct

Competency statement

Works in line with the Health and Care Professions Council *Standards of conduct, performance and ethics*.

Outcome measure

Describes HCPC *Standards of conduct, performance and ethics* and **applies** them consistently in CT practice.

Assessor initials:

Date:

Recognises signs of stress in self/others and uses compassionate communication to support colleagues.

Assessor initials:

Date:

Identifies unacceptable behaviours and follows zero-tolerance and escalation procedures.

Assessor initials:

Date:

Explains own limits of competence and escalates work outside scope appropriately.

Assessor initials:

Date:

Meets the standards required for registrants and **recognises** when own and others conduct and behaviours fail to meet the requirements.

Assessor initials:

Date:

Demonstrates an attitude of kindness and support towards colleagues in emotional and stressful situations.

Assessor initials:

Date:

Meets professional and regulatory standards of conduct

Competency statement

Works in line with the Society of Radiographers' Code of Professional Conduct 2025.

Outcome measure

Demonstrates alignment with the Society of Radiographers' Code of Professional Conduct in day-to-day practice.

Assessor initials:

Date:

Meets professional and regulatory standards of conduct

Evidence


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Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Staff development and performance

Competency statement

Demonstrates commitment to organisational staff development and performance review procedures.

Outcome measure

Explains local appraisal and supervision processes and **participates** in reviews with accurate evidence.

Assessor initials:

Date:

Identifies own learning needs and **applies** agreed development plans, including preceptorship and supervision.

Assessor initials:

Date:

Follows scope-of-practice boundaries and seeks advice for tasks beyond competence.

Assessor initials:

Date:

Supports learners by **applying** basics of feedback and one-to-one guidance.

Assessor initials:

Date:

Documents learning activities and outcomes to **apply** evidence-based practice.

Assessor initials:

Date:

Takes responsibility for own wellbeing following distressing situations, including accessing available resources, considering prescribed or suggested talking therapies, reflection, clinical supervision, mentorship or debriefing sessions.

Assessor initials:

Date:

Staff development and performance

Evidence


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Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Patient-centred care

Competency statement

Provides the patient with high standards of care with particular attention to children, those who lack capacity, those with additional needs, deteriorating patients and patients with protected characteristics.

Outcome measure

Remembers and **describes** the principles of delivering safe, person-centred care, including the importance of introducing themselves and colleagues.

Assessor initials:

Date:

Understands the importance of knowing a person's preferred names and pronouns, working respectfully with those who lack capacity, those with additional needs, deteriorating patients and people with protected characteristics.

Assessor initials:

Date:

Identifies each patient's individual needs through verbal and non-verbal communication.

Assessor initials:

Date:

Applies effective communication techniques to gain patient or carer trust, provides reassurance and advocates for patient safety and wellbeing.

Assessor initials:

Date:

Follows equality, diversity, inclusion and belonging (EDIB) principles and escalates concerns appropriately.

Assessor initials:

Date:

Patient-centred care

Competency statement

Provides the patient with high standards of care with particular attention to children, those who lack capacity, those with additional needs, deteriorating patients and patients with protected characteristics.

Outcome measure

Uses IT systems correctly to ensure all clinical information is reviewed before proceeding and **applies** consent procedures, including lawful approaches when a patient lacks capacity.

Assessor initials:

Date:

Performs immediate life support (ILS) emergency responses, approved moving and handling techniques, infection control and risk assessments to ensure patient comfort, safety and dignity.

Assessor initials:

Date:

Applies safe and competent IV cannulation, aseptic non-touch technique (ANTT) and pregnancy and medicines checks, including communicating risks and benefits clearly, and acts appropriately during extravasation or contrast reactions.

Assessor initials:

Date:

Ensures patients are safe, clean and fully informed about what happens next before they leave the department.

Assessor initials:

Date:

Patient-centred care

Competency statement

➤ **Application of CoR accredited or equivalent IV cannulation and medicines knowledge and skills to provide individual patient-centred care.**

Outcome measure

Remembers and **describes** the principles of safe IV cannulation, ANTT, and the pharmacology of contrast media and CT-related medicines.

Assessor initials:

Date:

Understands relevant legislation governing the supply and administration of medicines, including the use of PSDs and PGDs, and can correctly identify the prescriber or authorising mechanism for each patient.

Assessor initials:

Date:

Applies safe cannulation techniques, checks clinical information (including renal function and allergy status), and obtains informed consent for contrast administration.

Assessor initials:

Date:

Monitors patients throughout contrast delivery, **responding** appropriately to signs of discomfort, extravasation or adverse reactions.

Assessor initials:

Date:

Applies ILS skills appropriately during medicines-related emergencies.

Assessor initials:

Date:

Provides safe aftercare for patients following contrast administration and documents incidents in line with local procedures.

Assessor initials:

Date:

Patient-centred care

Competency statement

Supports general patient safety and wellbeing.

Outcome measure

Remembers and **describes** the principles of patient safety, including the purpose of the Patient Safety Incident Response Framework (PSIRF) in England, NHS Wales National Policy on Patient Safety Incident Reporting and Management, A National Framework for Reviewing and Learning from Adverse Events in NHS Scotland and local incident reporting processes and duty of candour requirements.

Assessor initials:

Date:

Understands how to report patient safety incidents, near misses and concerns using the organisation's reporting systems and the national taxonomy.

Assessor initials:

Date:

Applies learning from incidents and near misses by following updated procedures and ensuring personal practice aligns with safety recommendations.

Assessor initials:

Date:

Patient-centred care

Evidence


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To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Radiation safety – IRR

Competency statement

➤ **Applies ALARP principles to staff and the public.**

Outcome measure

Remembers and **describes** the core principle that all exposures to ionising radiation must be kept **as low as reasonably practicable (ALARP)**.

Assessor initials:

Date:

Understands the purpose and function of controlled and supervised areas, including boundaries, signage and entry/exit responsibilities.

Assessor initials:

Date:

Applies ALARP principles: understands the importance of maintaining appropriate distance, using shielding correctly and limiting time spent in controlled areas.

Assessor initials:

Date:

Understands when and how to seek advice from the Radiation Protection Supervisor (RPS) to ensure staff and public safety.

Assessor initials:

Date:

Applies routine safety checks to ensure controlled area systems are functioning correctly and escalates deviations from expected standards.

Assessor initials:

Date:

Radiation safety – IRR

Competency statement

Practises in accordance with current legislation governing the use of ionising radiation for occupational and public exposures.

Outcome measure

Remembers and **describes** the key requirements of The Ionising Radiations Regulations 2017 in relation to occupational and public exposures. Understands measures required for the radiation safety of self and others.

Assessor initials:

Date:

Understands personal responsibilities for radiation safety and occupational dose monitoring, including the use of personal dosimetry, the hierarchy of controls and the safe use of personal protective equipment.

Assessor initials:

Date:

Applies local rules consistently to protect staff and the public, ensuring safe behaviour, access restriction and correct use of equipment within controlled areas.

Assessor initials:

Date:

Undertakes daily safety checks of radiation-producing equipment and environment, escalating concerns appropriately.

Assessor initials:

Date:

Understands how to classify, document and report radiation incidents or near-misses affecting staff or the public, and follows employer procedures accurately.

Assessor initials:

Date:

Radiation safety – IRR

Competency statement

Outcome measure

Emergency preparedness.

Remembers and describes the organisation's contingency plans and evacuation procedures relevant to CT.

Assessor initials:

Date:

Understands the actions required in emergency situations and their role in maintaining safety for patients, staff and members of the public.

Assessor initials:

Date:

Applies emergency procedures appropriately when required, including responding promptly to unexpected equipment failure, safety hazards or environmental threats within the CT environment.

Assessor initials:

Date:

Follows instructions from senior staff during an emergency and completes required documentation after the event.

Assessor initials:

Date:

Radiation safety – IRR

Competency statement

Outcome measure

Personal dose monitoring.

Remembers personal dose limits and the purpose of occupational dose monitoring.

Assessor initials:

Date:

Understands how to correctly wear and handle personal dosimeters and why consistent compliance is required.

Assessor initials:

Date:

Applies employer procedures for personal radiation monitoring, ensuring dosimeters are used appropriately and returned on schedule.

Assessor initials:

Date:

Understands investigation levels and knows when a dose reading should be escalated for review.

Assessor initials:

Date:

Radiation safety – IRR

Evidence


Signpost
supporting
evidence
here

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Radiation safety – IR(ME)R

Competency statement

IR(ME)R-specific radiation safety

Practises in accordance with current legislation as applicable to exposures detailed in IR(ME)R regulation 3.

Outcome measure

Remembers and **describes** the key requirements of The Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R) legislation governing the use of ionising radiation for medical exposures.

Assessor initials:

Date:

Understands the distinct responsibilities of IR(ME)R duty holders (referrer, practitioner, operator) and their own role-specific entitlements.

Assessor initials:

Date:

Applies employer's procedures consistently to ensure all exposures are justified, authorised, optimised and carried out safely within their scope of practice.

Assessor initials:

Date:

Understands the importance of consulting the medical physics expert (MPE) when required and follows local and national guidance relating to equipment performance, quality assurance and radiation safety.

Assessor initials:

Date:

Applies accurate documentation of exposures and follows escalation procedures when clinical information, referrals or protocols appear inappropriate or unclear.

Assessor initials:

Date:

Radiation safety – IR(ME)R

Competency statement

Works within a given scope of practice and scope of IR(ME)R entitlement as defined by the employer.

Outcome measure

Remembers and **describes** their individual scope of practice and IR(ME)R entitlement as defined by the employer.

Assessor initials:

Date:

Understands the responsibilities of IR(ME)R duty holders and the importance of acting only within their entitled role.

Assessor initials:

Date:

Applies employer's procedures when undertaking exposures, checking referrals or performing associated practical aspects of an exposure.

Assessor initials:

Date:

Understands when to escalate concerns about referrals, unclear justification or requests that fall outside their scope of practice.

Assessor initials:

Date:

Applies correct procedures for verifying clinical information, checking previous imaging and ensuring appropriate protocols are used.

Assessor initials:

Date:

Radiation safety – IR(ME)R

Competency statement

Acts as the IR(ME)R operator or practitioner in the process of justification.

Outcome measure

Describes their responsibilities as an IR(ME)R operator, including verifying referral information, patient identity, and protocol selection.

Assessor initials:

Date:

Understands when an exposure can be authorised using IR(ME)R practitioner-issued guidelines and recognises when to seek advice.

Assessor initials:

Date:

Applies operator responsibilities by confirming justification and authorisation of exposures before proceeding.

Assessor initials:

Date:

Applies preset protocols appropriately and **understands** how to identify when a protocol is unclear or potentially inappropriate.

Assessor initials:

Date:

Understands Local and National Diagnostic Reference Levels (LDRLs and NDRLs) and the importance of dose optimisation.

Assessor initials:

Date:

Applies ALARP principles and seeks advice when exposure parameters appear inconsistent with expected projected dose.

Assessor initials:

Date:

Radiation safety – IR(ME)R

Competency statement

Robust radiation incident reporting

➤ **Fulfil obligations in line with organisational incident reporting processes.**

Outcome measure

Recognises a significant accidental or unintended exposure (SAUE) and knows how to escalate promptly.

Assessor initials:

Date:

Understands the existence of national incident-learning systems and the importance of organisational participation in them.

Assessor initials:

Date:

Radiation safety – IR(ME)R

Evidence


Signpost
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evidence
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Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

PCE and reporting

Competency statement

Preliminary Clinical Evaluation (PCE)

Is trained and entitled to provide a preliminary clinical evaluation (PCE) within a clearly defined scope of practice.

Outcome measure

Describes the purpose of PCE and understands that they must not provide a clinical opinion beyond their training and entitlement.

Assessor initials:

Date:

Understands how to review images for technical accuracy and quality, ensuring images meet diagnostic requirements before releasing the patient.

Assessor initials:

Date:

Applies PCE-related responsibilities by identifying an agreed list of common critical or urgent findings and escalating concerns to senior staff.

Assessor initials:

Date:

Understands the limits of their scope of practice and documents any concerns appropriately.

Assessor initials:

Date:

PCE and reporting

Competency statement

Clinical Evaluation
(formal reporting)

➤ Is adequately trained and entitled as an IR(ME)R operator to provide a formal written clinical evaluation (report).

Outcome measure

Not applicable.

Assessor initials:

Date:

PCE and reporting

Evidence


Signpost
supporting
evidence
here

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Medicines management

Competency statement

Understands and complies with medicines legislation and employer's procedures regarding the use of medicines as applied to CT.

Outcome measure

Describes relevant medicines legislation and employer's procedures relating to the safe use of medicines in CT.

Assessor initials:

Date:

Understands the correct use of Patient Group Directions (PGDs), Patient Specific Directions (PSDs), and identifies the prescriber for any medicine administered.

Assessor initials:

Date:

As a minimum, has completed an accredited course and **understands** responsibilities related to the administration of contrast agents. **Applies** safe practice when administering intravenous contrast, sodium chloride and other CT-related medicines. **Demonstrates** cannulation skills including explaining risks and obtaining consent.

Assessor initials:

Date:

Understands pharmacology relevant to intravascular iodinated contrast and the physiological responses that may occur. **Acts** to prevent risk of contrast-induced acute kidney injury (CI-AKI) and embolic complications. Understands when renal function is within a safe range to proceed.

Assessor initials:

Date:

Medicines management

Competency statement

Understands and complies with medicines legislation and employer's procedures regarding the use of medicines as applied to CT.

Outcome measure

Applies aseptic non-touch technique (ANTT) during cannulation and medication administration. **Applies** risk assessment criteria to prevent extravasation.

Assessor initials:

Date:

Monitors patients throughout administration and **responds** appropriately to discomfort, deterioration, extravasation or adverse reactions. Provides immediate patient care in the event of extravasation to minimise the risk to the patient. Documents incidents in line with local policy.

Assessor initials:

Date:

Applies immediate life-support skills as required and follows local emergency procedures.

Assessor initials:

Date:

Understands the correct storage, handling and documentation requirements for medicines, including warming iodinated contrast.

Assessor initials:

Date:

Applies safe aftercare processes, ensuring patients receive appropriate information and follow-up when needed.

Assessor initials:

Date:

Medicines management

Evidence


Signpost
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evidence
here

Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

Continuing Professional Development

Competency statement

➤ Understands regulatory, professional and employer requirements to undertake continuing professional development (CPD).

Outcome measure

Remembers the regulatory, professional and employer requirements for maintaining CPD, including record keeping and evidence of learning.

Assessor initials:

Date:

Understands the importance of CPD for safe, effective practice and professional registration, and can describe how CPD links to the four pillars of radiographic practice.

Assessor initials:

Date:

Applies CPD requirements by maintaining an accurate personal portfolio demonstrating mandatory training, reflective practice and participation in supervised learning opportunities.

Assessor initials:

Date:

Identifies learning needs through self-reflection, supervision discussions and feedback, and applies appropriate actions to address them.

Assessor initials:

Date:

Participates actively in preceptorship, local teaching and departmental learning activities, demonstrating responsibility for their own professional development.

Assessor initials:

Date:

Continuing Professional Development

Evidence


Signpost
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evidence
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Sign-off section

To the best of their knowledge, the undersigned attest to having completed a fair assessment without bias, discrimination or prejudice.

Radiographer:

Signed: [typed name]

Date:

Assessed as competent by:

Signed: [typed name]

Date:

Approved by Competency Panel:

Signed: [typed name]

Date:

CT competencies: Evidence

Examples of evidence that could be used throughout the framework, in no particular order:

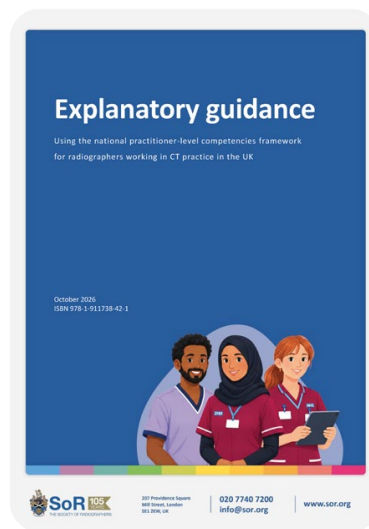
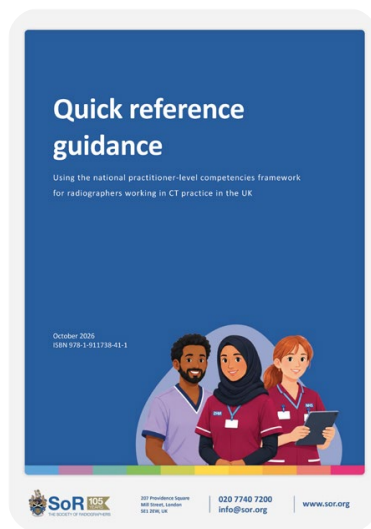
- A certificate equivalent to diagnostic or therapeutic radiography pre-registration education at FHEQ level 6/SCQF level 10 issued by an institute or person competent to award degrees or diplomas, or to provide other evidence of adequate training.
- Registration as a diagnostic or therapeutic radiographer with the Health and Care Professions Council.
- Employer verification for meeting *The standards of proficiency for radiographers* set by the HCPC.
- Successful completion of a period of preceptorship.
- Completed daily/weekly quality control (QC) checklists and scanner warm-up logs (signed and dated).
- Audit of accurate completion of patient selection, image labelling, data entry and data transfer records.
- Participation logs from local audits (e.g. image quality, repeat/recall rate audits).
- Reflective statements summarising learning from incidents or near misses.
- Supervisor sign off confirming consistent compliance with local quality assurance (QA) procedures.
- Examples of correctly escalated equipment faults or data quality issues.
- Case examples showing identification of trends in QC drift and compliance with reporting and corrective action procedures.
- Teaching materials or coaching notes used to support training and development.
- Documentation of troubleshooting steps taken to resolve patient identification or incorrect data transfer issues.
- Contribution to team discussions or multi disciplinary team meetings.
- Contribution to radiology events and learning meetings (REALM).
- Reflective accounts showing analysis of image quality and optimisation issues.
- Full audit reports (image quality, repeat rates, DRL compliance, data accuracy) with action plans.
- Contributions to updating local SOPs, protocols, training materials or induction documentation.

CT competencies: Evidence

- Evidence of leading service evaluations or quality improvement projects.
- Active participation in radiation safety committee meetings.
- Documentation showing collaboration with medical physics, engineering or IT teams to resolve complex quality issues.
- Evidence of supporting or leading quality mark work (QSI/QSIN or equivalent quality programmes).
- Contribution to the development of business cases for equipment replacement, QA investment, staffing or system upgrades based on quality metrics.
- Published QA-related research, quality improvement outputs or conference abstracts.
- Documented formal post graduate training and education.

Links:

Supporting documents can be found on the publications page at: sor.org/ctcomp



National practitioner-level competencies for radiographers working in CT practice in the UK

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207 Providence Square
Mill Street, London
SE1 2EW, UK

020 7740 7200
info@sor.org

www.sor.org

