

Standards of proficiency

Comparison table: Radiographers

This table compares the standards of proficiency that came into effect on 1 September 2023 (left) and the standards that were in place before that date (right).

	<u>Current standards (2023)</u>	<u>Previous standards (pre-2023)</u>
	At the point of registration, radiographers must be able to:	Registrant radiographers must:
1	practise safely and effectively within their scope of practice	be able to practise safely and effectively within their scope of practice
1.1	identify the limits of their practice and when to seek advice or refer to another professional or service	know the limits of their practice and when to seek advice or refer to another professional
1.2	recognise the need to manage their own workload and resources safely and effectively, including managing the emotional burden that comes with working in a pressured environment	be able to manage their own workload and resources effectively and be able to practise accordingly
1.3	keep their skills and knowledge up to date and understand the importance of continuing professional development throughout their career	
2	practise within the legal and ethical boundaries of their profession	be able to practise within the legal and ethical boundaries of their profession
2.1	maintain high standards of personal and professional conduct	understand the need to act in the best interests of service users at all times
2.2	promote and protect the service user's interests at all times	understand what is required of them by the Health and Care Professions Council

2.3	understand the importance of safeguarding by actively looking for signs of abuse, demonstrating understanding of relevant safeguarding processes and engaging in these processes where necessary	understand the need to respect and uphold the rights, dignity, values, and autonomy of service users including their role in the diagnostic and therapeutic process and in maintaining health and wellbeing
2.4	understand what is required of them by the Health and Care Professions Council, including, but not limited to, the standards of conduct, performance and ethics	recognise that relationships with service users should be based on mutual respect and trust, and be able to maintain high standards of care even in situations of personal incompatibility
2.5	respect and uphold the rights, dignity, values and autonomy of service users, including their role in the assessment, diagnostic, treatment and/or therapeutic process	know about current legislation applicable to the work of their profession
2.6	recognise that relationships with service users, carers and others should be based on mutual respect and trust, maintaining high standards of care in all circumstances	be able to practise in accordance with current legislation governing the use of ionising and non-ionising radiation for medical and other purposes
2.7	understand the importance of and be able to obtain valid consent, which is voluntary and informed, has due regard to capacity, is proportionate to the circumstances and is appropriately documented	understand the importance of and be able to obtain informed consent
2.8	understand the importance of capacity in the context of delivering care and treatment	be able to exercise a professional duty of care
2.9	understand the scope of a professional duty of care, and exercise that duty	understand the legislative, policy, ethical and research frameworks that underpin, inform and influence the practice of radiography
2.10	understand and apply legislation, policies and guidance relevant to their profession and scope of practice	

2.11	recognise the power imbalance that comes with being a healthcare professional, and ensure they do not abuse this for personal gain	
2.12	practise in accordance with current legislation governing the use of ionising and non-ionising radiation for medical and other purposes	
2.13	understand the legislative, policy, ethical and research frameworks that underpin, inform and influence the practice of radiography	
3	look after their health and wellbeing, seeking appropriate support where necessary	be able to maintain fitness to practise
3.1	identify anxiety and stress in themselves and recognise the potential impact on their practice	understand the need to maintain high standards of personal and professional conduct
3.2	understand the importance of their own mental and physical health and wellbeing strategies in maintaining fitness to practise	understand the importance of maintaining their own health
3.3	understand how to take appropriate action if their health may affect their ability to practise safely and effectively, including seeking help and support when necessary	understand both the need to keep skills and knowledge up to date and the importance of life-long learning
3.4	develop and adopt clear strategies for physical and mental self-care and self-awareness, to maintain a high standard of professional effectiveness and a safe working environment	
4	practise as an autonomous professional, exercising their own professional judgement	be able to practise as an autonomous professional, exercising their own professional judgement

4.1	recognise that they are personally responsible for, and must be able to justify, their decisions and actions	be able to assess a professional situation, determine the nature and severity of the problem and call upon the required knowledge and experience to deal with the problem
4.2	use their skills, knowledge and experience, and the information available to them, to make informed decisions and/or take action where necessary	be able to make reasoned decisions to initiate, continue, modify or cease radiotherapy treatment or diagnostic imaging examinations and record the decisions and reasoning appropriately
4.3	make reasoned decisions to initiate, continue, modify or cease treatment, or the use of techniques or procedures, and record the decisions and reasoning appropriately	be able to initiate resolution of problems and be able to exercise personal initiative
4.4	make and receive appropriate referrals, where necessary	recognise that they are personally responsible for and must be able to justify their decisions
4.5	exercise personal initiative	be able to make and receive appropriate referrals
4.6	demonstrate a logical and systematic approach to problem-solving	understand the importance of participation in training, supervision and mentoring
4.7	use research, reasoning and problem-solving skills when determining appropriate actions	
4.8	understand the need for active participation in training, supervision and mentoring in supporting high standards of practice, and personal and professional conduct, and the importance of demonstrating this in practice	
5	recognise the impact of culture, equality and diversity on practice and practise in a non-discriminatory and inclusive manner	be aware of the impact of culture, equality, and diversity on practice

5.1	respond appropriately to the needs of all groups and individuals in practice, recognising that this can be affected by difference of any kind including, but not limited to, protected characteristics, intersectional experiences and cultural differences	understand the requirement to adapt practice to meet the needs of different groups and individuals
5.2	understand equality legislation and apply it to their practice	understand the emotions, behaviours and psychosocial needs of people undergoing radiotherapy or diagnostic imaging, as well as that of their families and carers
5.3	recognise the potential impact of their own values, beliefs and personal biases (which may be unconscious) on practice and take personal action to ensure all service users and carers are treated appropriately with respect and dignity	be able to provide appropriate information and support for service users throughout their radiotherapy treatment and care or diagnostic imaging examinations
5.4	understand the duty to make reasonable adjustments in practice and be able to make and support reasonable adjustments in their and others' practice	
5.5	recognise the characteristics and consequences of barriers to inclusion, including for socially isolated groups	
5.6	actively challenge these barriers, supporting the implementation of change wherever possible	
5.7	recognise that regard to equality, diversity and inclusion needs to be embedded in the application of all HCPC standards, across all areas of practice	
5.8	understand the emotions, behaviours and psychosocial needs of people undergoing radiotherapy or diagnostic imaging, as well as that of their families and carers	

6		
6	understand the importance of and maintain confidentiality	be able to practise in a non-discriminatory manner
6.1	adhere to the professional duty of confidentiality and understand when disclosure may be required	
6.2	understand the principles of information and data governance and be aware of the safe and effective use of health, social care and other relevant information	
6.3	recognise and respond in a timely manner to situations where it is necessary to share information to safeguard service users, carers and/or the wider public	
6.4	understand the need to ensure that confidentiality is maintained in all situations in which service users rely on additional communication support (such as interpreters or translators)	
6.5	recognise that the concepts of confidentiality and informed consent extend to all mediums, including illustrative clinical records such as photography, video and audio recordings and digital platforms	
7		
7	communicate effectively	understand the importance of and be able to maintain confidentiality
7.1	use effective and appropriate verbal and non-verbal skills to communicate with service users, carers, colleagues and others	be aware of the limits of the concept of confidentiality

7.2	communicate in English to the required standard for their profession (equivalent to level 7 of the International English Language Testing System, with no element below 6.5)	understand the principles of information governance and be aware of the safe and effective use of health and social care information
7.3	understand the characteristics and consequences of verbal and non-verbal communication and recognise how these can be affected by difference of any kind, including, but not limited to, protected characteristics, intersectional experiences and cultural differences	be able to recognise and respond appropriately to situations where it is necessary to share information to safeguard service users or the wider public
7.4	work with service users and/or their carers to facilitate the service user's preferred role in decision-making, and provide service users and carers with the information they may need where appropriate	
7.5	modify their own means of communication to address the individual communication needs and preferences of service users and carers, and remove any barriers to communication where possible	
7.6	understand the need to support the communication needs of service users and carers, such as through the use of an appropriate interpreter	
7.7	use information, communication and digital technologies appropriate to their practice	
7.8	understand the need to provide service users or people acting on their behalf with the information necessary, in accessible formats, to enable them to make informed decisions	

7.9	formulate and provide information and support for service users about their treatment and/or imaging process and procedures, with regular reappraisal of their information needs as appropriate	
Diagnostic radiographers only		
7.10	advise other healthcare professionals about the relevance and application of imaging modalities to the service user's needs	
7.11	provide appropriate information and support for service users throughout their diagnostic imaging examinations	
Therapeutic radiographers only		
7.12	advise other healthcare professionals about the relevance and application of radiotherapy and, where relevant, imaging modalities to the service user's needs	
7.13	provide appropriate information and support for service users throughout their radiotherapy treatment and care or related diagnostic imaging examinations	
8	work appropriately with others	be able to communicate effectively
8.1	work in partnership with service users, carers, colleagues and others	be able to demonstrate effective and appropriate verbal and non-verbal skills in communicating information, advice, instruction and professional opinion to service users, colleagues and others
8.2	recognise the principles and practices of other health and care professionals and systems and how they interact with their profession	be able to communicate in English to the standard equivalent to level 7 of the International English Language Testing System, with no element below 6.5

8.3	understand the need to build and sustain professional relationships as both an autonomous practitioner and collaboratively as a member of a team	understand how communication skills affect assessment and engagement of service users and how the means of communication should be modified to address and take account of factors such as age, capacity, learning ability and physical ability
8.4	contribute effectively to work undertaken as part of a multi-disciplinary team	be aware of the characteristics and consequences of verbal and non-verbal communication and how this can be affected by factors such as age, culture, ethnicity, gender, socio-economic status and spiritual or religious beliefs
8.5	identify anxiety and stress in service users, carers and colleagues, adapting their practice and providing support where appropriate	understand the need to provide service users or people acting on their behalf with the information necessary to enable them to make informed decisions
8.6	understand the qualities, behaviours and benefits of leadership	understand the need to assist the communication needs of service users such as through the use of an appropriate interpreter, wherever possible
8.7	recognise that leadership is a skill all professionals can demonstrate	recognise the need to use interpersonal skills to encourage the active participation of service users
8.8	identify their own leadership qualities, behaviours and approaches, taking into account the importance of equality, diversity and inclusion	be able to advise other healthcare professionals about the relevance and application of radiotherapy or imaging modalities to the service user's needs
8.9	demonstrate leadership behaviours appropriate to their practice	be able to formulate and provide information to service users about the treatment or imaging process and procedures, with regular reappraisal of their information needs, as appropriate
8.10	act as a role model for others	
8.11	promote and engage in the learning of others	

8.12	demonstrate awareness of the need to empower service users to participate in the decision-making processes related to their profession	
8.13	demonstrate awareness of the need to encourage, support and mentor staff at all practitioner levels	
8.14	demonstrate awareness of roles and responsibilities where work is delegated and demonstrate understanding of how this applies in practice	
8.15	understand, interpret and act upon information from other healthcare professionals and service users, in order to maximise health gain whilst minimising risks to the service user (such as from radiation dose)	
8.16	understand the need to involve service users in service design, service delivery, education and research	
Diagnostic radiographers only		
8.17	understand the need to engage service users and carers in planning and evaluating their diagnostic imaging and interventional procedures	
Therapeutic radiographers only		
8.18	understand the need to engage service users and carers in radiotherapy pre-treatment planning, treatment and follow-up, and where relevant in planning and evaluating their diagnostic imaging and interventional procedures	

9	maintain records appropriately	be able to work appropriately with others
9.1	keep full, clear and accurate records in accordance with applicable legislation, protocols and guidelines	be able to work, where appropriate, in partnership with service users, other professionals, support staff and others
9.2	manage records and all other information in accordance with applicable legislation, protocols and guidelines	understand the need to build and sustain professional relationships as both an independent professional and collaboratively as a member of a team
9.3	use digital record keeping tools, where required	understand the need to engage service users and carers in planning and evaluating their diagnostic imaging and interventional procedures or their radiotherapy pre-treatment planning, treatment and follow-up
		9.4 be aware of the need to empower service users to participate in the decision-making processes related to their radiotherapy or diagnostic imaging examination
		9.5 be able to contribute effectively to work undertaken as part of a multi-disciplinary team
		9.6 be able to understand, interpret and act upon information from other healthcare professionals, in order to maximise health gain whilst minimising radiation dose to the service user
10	reflect on and review practice	be able to maintain records appropriately
10.1	understand the value of reflective practice and the need to record the outcome of such reflection to support continuous improvement	be able to keep accurate, comprehensive and comprehensible records in accordance with applicable legislation, protocols and guidelines
10.2	recognise the value of multi-disciplinary reviews, case conferences and other methods of review	recognise the need to manage records and all other information in accordance with applicable legislation, protocols and guidelines

11	assure the quality of their practice	be able to reflect on and review practice
11.1	engage in evidence-based practice	understand the value of reflection on practice and the need to record the outcome of such reflection
11.2	gather and use feedback and information, including qualitative and quantitative data, to evaluate the response of service users to their care	recognise the value of multidisciplinary team reviews and other methods of review
11.3	monitor and systematically evaluate the quality of practice, and maintain an effective quality management and quality assurance process working towards continual improvement	
11.4	participate in quality management, including quality control, quality assurance, clinical governance and the use of appropriate outcome measures	
11.5	evaluate care plans or intervention plans using recognised and appropriate outcome measures, in conjunction with the service user where possible, and revise the plans as necessary	
11.6	recognise the value of gathering and using data for quality assurance and improvement programmes	
11.7	understand the principles and regulatory requirements for quality control and quality assurance as they apply to their profession	
11.8	understand the quality improvement processes in place relevant to their profession	

12	understand and apply the key concepts of the knowledge base relevant to their profession	be able to assure the quality of their practice
12.1	understand the structure and function of the human body, together with knowledge of physical and mental health, disease, disorder and dysfunction relevant to their profession	be able to engage in evidence-based practice, evaluate practice systematically, and participate in clinical and other audit procedures
12.2	demonstrate awareness of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process	be able to gather feedback and information that helps to evaluate the response of service users to their care
12.3	recognise the role(s) of other professions in health and social care and understand how they may relate to the role of radiographer	understand the principles of quality control and quality assurance as they apply to the practice of diagnostic or therapeutic radiography
12.4	understand the structure and function of health and social care systems and services in the UK	be aware of the role of audit and review in quality management, including quality control, quality assurance and the use of appropriate outcome measures
12.5	demonstrate awareness of the philosophy and the development of the profession of radiography to inform understanding of current practice	be able to maintain an effective audit trail and work towards continual improvement
12.6	understand the role of the radiographer and other operators in the promotion of health and health education in relation to public health, healthy living and health screening for disease detection	be aware of, and be able to participate in, quality assurance programmes, where appropriate
12.7	understand the harms and benefits of population and targeted health screening	recognise the need to monitor and evaluate the quality of practice and the value of contributing to the generation of data for quality assurance and improvement programmes

12.8	understand the radiobiological principles on which the practice of radiography is based	
12.9	understand the concept of risk vs benefit with regards to ionising radiation and non-ionising radiation, acknowledging this will differ depending on modality, and communicate this with service users, taking into consideration service user judgement	
12.10	understand the philosophy and principles involved in the practice of their profession	
12.11	understand and apply the principles of ionising radiation production, interaction with matter, beam modification, administration of radionuclides and radiation protection	
12.12	know the physical and scientific principles on which image formation using ionising and non-ionising radiation is based	
12.13	understand radiation dosimetry and the principles of dose calculation	
12.14	understand the theoretical basis underpinning service user assessment prior to and during their procedure	
12.15	understand the capability, applications and range of equipment used in their profession	
12.16	distinguish between normal and abnormal appearances on images	

12.17	know the concepts and principles involved in the practice of their profession and how these inform and direct clinical judgement and decision-making	
12.18	know the pharmacology of drugs used in their profession	
12.19	understand the legislation, principles and methods for the safe and effective administration of drugs used in their profession	
12.20	understand the mechanisms for the administration of drugs, including intravenous and oral contrast agents	
12.21	recognise and respond to adverse or abnormal reactions to medications used in relation to their profession	
12.22	understand the principles of the safe storage, transportation and disposal of medicinal products used in relation to their profession	
12.23	demonstrate awareness of the current developments and trends in the science and practice of radiography	
12.24	understand the different communication needs, anatomy and disease processes and their manifestation in children	
12.25	demonstrate awareness of the principles of Artificial Intelligence (AI) and deep learning technology, and its application to practice	

Diagnostic radiographers only		
12.26	understand the signs and symptoms of disease and trauma that result in referral for diagnostic imaging procedures, and their image appearances	
12.27	understand the structure and function of the human body in health, disease and trauma, as well as common pathologies and mechanisms of disease and trauma, including the: <ul style="list-style-type: none"> - musculoskeletal system; - soft tissue organs; - regional and cross-sectional anatomy of the head, neck, limbs, thorax, pelvis and abdomen; and - cardiovascular, respiratory, genito-urinary, gastro-intestinal and neuro-endocrine systems 	
Therapeutic radiographers only		
12.28	understand the structure and function of the human body in health and disease, including: <ul style="list-style-type: none"> - regional and cross-sectional anatomy of the head, neck, limbs, thorax, pelvis and abdomen; and - common pathologies and mechanisms of disease, with a concentration on cancer, histology, haematology and the lymphatic and immune systems 	

12.29	understand: <ul style="list-style-type: none"> - oncology, the pathophysiology of solid and systemic malignancies; - epidemiology; - aetiology; and - the management and effect of cancer 	
12.30	know the physiological signs and symptoms, clinical investigations and diagnostic procedures that result in referral for radiotherapy	
12.31	know the biochemical science of radiation pathophysiology	
12.32	understand the influence of adjuvant and neoadjuvant treatment, including surgery and chemotherapy, on radiotherapy dose prescription, timing of radiotherapy and post radiotherapy complications	
12.33	understand the principles of nuclear medicine and radionuclide procedures in radiotherapy guided planning and radionuclide therapies and theragnostics	
13	draw on appropriate knowledge and skills to inform practice	understand the key concepts of the knowledge base relevant to their profession
13.1	change their practice as needed to take account of new developments, technologies and changing contexts	understand the philosophy underpinning the development of the profession of radiography
13.2	gather appropriate information	understand the concept of leadership and its application to practice
13.3	analyse and critically evaluate the information collected	understand the role of the radiographer in the promotion of health and health education in relation to healthy living and health screening for disease detection

13.4	select and use appropriate assessment techniques and equipment	recognise the role of other professions and services in health and social care
13.5	undertake and record a thorough, sensitive and detailed assessment	understand the structure and function of the human body, together with knowledge of health, disease, disorder and dysfunction relevant to their profession
13.6	undertake or arrange investigations as appropriate	understand the radiobiological principles on which the practice of radiography is based
13.7	conduct appropriate assessment or monitoring procedures, treatment, therapy or other actions safely and effectively	understand the risk-benefit philosophy and principles involved in the practice of diagnostic or therapeutic radiography
13.8	recognise a range of research methodologies relevant to their role	be aware of the principles and applications of scientific enquiry, including the evaluation of treatment efficacy and the research process
13.9	recognise the value of research to the critical evaluation of practice	understand and be able to apply the physical principles of ionising radiation production, interaction with matter, beam modification and radiation protection for diagnostic imaging or radiotherapy treatment
13.10	critically evaluate research and other evidence to inform their own practice	know the physical and scientific principles on which image formation using ionising and non-ionising radiation is based
13.11	engage service users in research as appropriate	understand radiation dosimetry and the principles of dose calculation
13.12	formulate specific and appropriate management plans including the setting of timescales	understand the theoretical basis underpinning patient assessment prior to and during radiotherapy or diagnostic imaging examinations
13.13	assess, monitor and care for the service user across the pathway of care relevant to their profession	understand the capability, applications and range of technological equipment used in diagnostic imaging or radiotherapy

13.14	undertake and record a thorough, sensitive and detailed clinical assessment, selecting and using appropriate techniques and equipment	be able to distinguish between normal and abnormal appearances evident on images
13.15	use physical, graphical, verbal and electronic methods to collect and analyse information from a range of relevant sources, including service users' clinical history, diagnostic images and reports, pathological tests and results, dose recording and treatment verification systems	know the concepts and principles involved in the practice of diagnostic imaging or radiotherapy and how these inform and direct clinical judgement and decision making
13.16	interrogate and process data and information gathered accurately in order to conduct the procedures most appropriate to the service user's needs	know the pharmacology of drugs used in diagnostic imaging or during radiotherapy treatments
13.17	appraise image information for clinical manifestations and technical accuracy, and take further action as required	understand the methods of administration of drugs
13.18	manage complex and unpredictable situations including the ability to adapt planned procedures	be able to remove and re-apply dressings and supports
13.19	operate radiotherapy or diagnostic imaging equipment safely and accurately relevant to their profession	understand the quality assurance processes in place within diagnostic imaging or radiotherapy
13.20	check that equipment is functioning accurately and within the specifications, and to take appropriate action in the case of faulty functioning and operation	be aware of the current developments and trends in the science and practice of radiography

13.21	select and explain the rationale for radiographic techniques and immobilisation procedures appropriate to the service user's physical and disease management requirements	<p>Diagnostic radiographers only</p> <p>understand the structure and function of the human body in health, disease and trauma, as well as common pathologies and mechanisms of disease and trauma, including the:</p> <ul style="list-style-type: none"> - musculoskeletal system - soft tissue organs - regional and cross-sectional anatomy of the head, neck, thorax, - pelvis and abdomen - the cardiovascular, respiratory, genito-urinary, gastro-intestinal and neuro-endocrine systems
13.22	position and immobilise service users correctly for safe and accurate procedures	understand the signs and symptoms of disease and trauma that result in referral for diagnostic imaging procedures
Diagnostic radiographers only		<p>Therapeutic radiographers only</p> <p>understand the structure and function of the human body in health and disease, including:</p> <ul style="list-style-type: none"> - regional and cross-sectional anatomy of the head, neck, thorax, pelvis and abdomen - common pathologies and mechanisms of disease with a concentration on cancer, histology, haematology and the lymphatic and immune systems
13.23	authorise and plan appropriate diagnostic imaging examinations	
13.24	calculate radiation doses and exposures and record and understand the significance of radiation dose	<p>understand:</p> <ul style="list-style-type: none"> - oncology, the pathophysiology of solid and systemic malignancies - epidemiology - aetiology - the management and effect of cancer

13.25	perform a broad range of standard imaging techniques, including examinations requiring contrast agents for relevant modalities across a variety of diagnostic or screening care pathways	know the physiological signs and symptoms, clinical investigations and diagnostic procedures that result in referral for radiotherapy
13.26	assist with a range of more complex diagnostic imaging techniques and interventional procedures providing radiographic support to the service user and other members of the multidisciplinary team	know the biochemical science of radiation pathophysiology
13.27	provide appropriate care for the range of service users and their carers before, during and after imaging examinations, minimally invasive interventional procedures and contrast agent examinations	understand the influence of adjuvant treatment including surgery and chemotherapy on radiotherapy dose prescription, timing of radiotherapy and post radiotherapy complications
13.28	perform a range of imaging examinations where the service user's individual characteristics require examinations to be carried out using non-standard techniques	
13.29	perform a range of techniques using mobile imaging equipment outside of a dedicated imaging room	
13.30	manage and assist with imaging techniques performed on anaesthetised or unconscious patients	
13.31	adjust ionising radiation exposures and image recording parameters to achieve required image quality at optimal dose for children and adults	
13.32	perform a range of imaging techniques and interventions on children	

13.33	use to best effect the processing and related technology supporting imaging systems	
13.34	manage and assist with fluoroscopic diagnostic and interventional procedures, including those that are complex and involve the use of contrast agents	
13.35	perform a broad range of computed tomographic (CT) examinations, including standard head CT examinations, and assist with CT examinations of the spine, chest and abdomen in acute trauma, and to contribute effectively to other CT studies	
13.36	perform standard magnetic resonance imaging procedures	
13.37	assist with ultrasound imaging procedures	
13.38	assist with imaging procedures involving the use of radionuclides including PET tracers and particle emitters	
13.39	critically analyse clinical images for technical quality and suggest improvement if required	
13.40	distinguish disease trauma and urgent and unexpected findings as they manifest on diagnostic images, and take direct and timely action to assist the referrer	
Therapeutic radiographers only		
13.41	plan appropriate radiotherapy procedures	

13.42	assist in the construction of appropriate immobilisation (including beam modifying) devices, individualised to the specific needs of each service user and the treatment regime prescribed	
13.43	identify organs at risk (OAR) on images to provide information for radiotherapy treatment planning	
13.44	calculate dose across a range of radiation modalities, including photons, protons and electrons, utilising a treatment planning system and verify this accordingly with a record and verification system	
13.45	<p>in relation to radiotherapy planning:</p> <ul style="list-style-type: none"> - support service users in understanding radiation exposure, risk and benefit associated with radiation exposure and doses in relation to their imaging examination; - perform multimodality imaging techniques and the image registration process, and where appropriate contrast agent examinations, demonstrating appropriate care to service users and their carers; - manipulate exposure and image recording parameters to optimal effect; - perform standard Computed Tomographic (CT) and assist in performing Magnetic Resonance (MR) planning procedures; and - use to best effect the processing and related technology supporting imaging systems 	

13.46	generate a treatment plan and verify treatment parameters ensuring optimal radiotherapy prescription delivery	
13.47	use to best effect the image processing and related technology, including computer-based imaging systems for radiotherapy purposes	
13.48	perform the full range of radiotherapy processes and techniques accurately and safely	
13.49	manage and assist with fluoroscopic procedures, including those requiring the use of contrast agents	
13.50	interpret and evaluate images obtained during radiotherapy planning and treatment, taking appropriate action to optimise accuracy of dose delivery to the target volume	
13.51	check that the OAR dose is as planned or prescribed during treatment	
13.52	localise the target volume precisely in relation to external surface and anatomical reference markings using a range of techniques including CT and MR imaging for the purpose of radiotherapy planning and delivery	
13.53	critically evaluate and interpret the radiation prescription in such a way that radiotherapy is delivered accurately and reproducibly	

13.54	recognise changing signs, symptoms and progression of disease, and make appropriate decisions not to treat or to review further before proceeding with treatment, including reviewing treatment imaging information	
14	establish and maintain a safe practice environment	be able to draw on appropriate knowledge and skills to inform practice
14.1	understand the need to maintain the safety of themselves and others, including service users, carers and colleagues	be able to conduct appropriate diagnostic or monitoring procedures, treatment, therapy or other actions safely and accurately
14.2	demonstrate awareness of relevant health and safety legislation and comply with all local operational procedures and policies	be able to formulate specific and appropriate management plans including the setting of timescales
14.3	work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques, in a safe manner and in accordance with health and safety legislation	be able to assess, monitor and care for the service user before, during and after diagnostic imaging procedures or radiotherapy treatments
14.4	select appropriate personal protective equipment and use it correctly	be able to use independent methods to establish and confirm service user identity prior to undertaking diagnostic imaging procedures or delivering radiotherapy treatments
14.5	establish safe environments for practice, which appropriately manage risk	be able to undertake or arrange investigations as appropriate
14.6	understand and apply appropriate moving and handling techniques	be able to undertake and record a thorough, sensitive and detailed clinical assessment, selecting and using appropriate techniques and equipment

14.7	ensure the physical safety of all individuals in the imaging/therapeutic work environment, especially with regard to radiation safety and high-strength magnetic fields	be able to gather appropriate information
14.8	use basic life-support techniques and be able to deal with clinical emergencies	be able to use physical, graphical, verbal and electronic methods to collect and analyse information from a range of sources including service user's clinical history, diagnostic images and reports, pathological tests and results, dose recording and treatment verification systems
14.9	know the correct principles and applications of disinfectants, methods for sterilisation and decontamination, and for dealing with waste and spillages correctly	be able to interrogate and process data and information gathered accurately in order to conduct the imaging procedure or radiotherapy most appropriate to the service user's needs
		14.10 be able to appraise image information for clinical manifestations and technical accuracy, and take further action as required
		14.11 be able to manage complex and unpredictable situations including the ability to adapt planned diagnostic imaging examinations, interventions or treatments
		14.12 be able to demonstrate a logical and systematic approach to problem solving
		14.13 be able to change their practice as needed to take account of new developments, technologies and changing contexts
		14.14 be able to use research, reasoning and problem solving skills to determine appropriate actions
		14.15 be aware of a range of research methodologies
		14.16 recognise the value of research to the critical evaluation of practice

		14.17 be able to evaluate research and other evidence to inform their own practice
		14.18 be able to operate radiotherapy or diagnostic imaging equipment safely and accurately
		14.19 be able to demonstrate spatial awareness, visual precision and manual dexterity in the precise and safe manipulation of treatment units or imaging equipment and related accessory equipment
		14.20 be able to check that equipment is functioning accurately and within the specifications, and to take appropriate action in the case of faulty functioning and operation
		14.21 be able to use information and communication technologies appropriate to their practice
		14.22 be able to apply the risk-benefit philosophy to radiation exposure to protect both individual service users and the population gene pool
		14.23 be able to select and explain the rationale for examination and treatment techniques and immobilisation procedures appropriate to the service user's physical and disease management requirements
		14.24 be able to position and immobilise service users correctly for safe and accurate diagnostic imaging examinations or radiotherapy treatments
		Diagnostic radiographers only 14.25 be able to plan appropriate diagnostic imaging examinations
		14.26 be able to calculate radiation doses and exposures and record and understand the significance of radiation dose

		14.27 be able to perform the full range of standard imaging techniques and contrast agent examinations, including those undertaken on service users suffering from acute trauma, and where the service user's medical, physical or mental health needs require examinations to be carried out in non-standard imaging environments
		14.28 be able to manipulate exposure and image recording parameters to optimal effect
		14.29 be able to use to best effect the processing and related technology supporting imaging systems
		14.30 be able to manage and assist with fluoroscopic diagnostic and interventional procedures, including those that are complex and involve the use of contrast agents
		14.31 be able to perform a standard head computed tomographic (CT) examination, assist with CT examinations of the spine, chest and abdomen in acute trauma, and to contribute effectively to other CT studies
		14.32 be able to assist with standard magnetic resonance imaging procedures
		14.33 be able to assist with ultrasound imaging procedures
		14.34 be able to assist with imaging procedures involving the use of radionuclides
		14.35 be able to distinguish disease and trauma processes as they manifest on diagnostic images
		Therapeutic radiographers only 14.36 be able to plan appropriate radiotherapy procedures

		14.37 be able to generate a treatment plan and verify treatment parameters ensuring optimal radiotherapy prescription delivery
		14.38 be able to use to best effect the image processing and related technology, including computer-based imaging systems for radiotherapy purposes
		14.39 be able to perform the full range of radiotherapy processes and techniques accurately and safely
		14.40 be able to calculate radiation doses and exposures
		14.41 be able to scrutinise and interpret the radiation prescription in such a way that radiotherapy is delivered accurately and reproducibly
		14.42 be able to manage and assist with fluoroscopic procedures, including those requiring the use of contrast agents
		14.43 be able to assist in performing standard computed tomographic (CT) planning procedures
		14.44 be able to assist in the construction of appropriate immobilisation devices, individualised to the specific needs of each patient and the treatment regime prescribed
		14.45 be able to undertake complex radiation dose delivery calculations involving a range of radiation types and energies
		14.46 be able to localise the target volume precisely in relation to external surface and anatomical reference markings using a range of techniques including computed tomography and magnetic resonance imaging

		14.47 be able to manipulate exposure and image recording parameters to optimal effect and interpret and evaluate images obtained during radiotherapy planning and treatment
		14.48 be able to interpret and evaluate images obtained during radiotherapy planning and treatment
		14.49 be able to identify organs at risk on images to provide information for radiotherapy treatment planning
		14.50 be able to recognise changing signs, symptoms and progression of disease, and make appropriate decisions not to treat or to review further before proceeding with treatment
15	promote health and prevent ill health	understand the need to establish and maintain a safe practice environment
15.1	understand the role of their profession in health promotion, health education and preventing ill health	understand the need to maintain the safety of both service users and those involved in their care
15.2	understand how social, economic and environmental factors (wider determinants of health) can influence a person's health and wellbeing	be aware of applicable health and safety legislation, and any relevant safety policies and procedures in force at the workplace, such as incident reporting and be able to act in accordance with these
15.3	empower and enable individuals (including service users and colleagues) to play a part in managing their own health	understand the need to ensure the physical and radiation safety of all individuals in the immediate work environment at all times
15.4	engage in occupational health, including being aware of immunisation requirements	be able to establish safe environments for practice, which minimise risks to service users, those treating them and others, including the use of hazard control and particularly infection control

		15.5 be able to work safely, including being able to select appropriate hazard control and risk management, reduction or elimination techniques in a safe manner and in accordance with health and safety legislation
		15.6 be able to select appropriate personal protective equipment and use it correctly
		15.7 be able to use basic life support techniques and be able to deal safely with clinical emergencies
		15.8 know and be able to apply appropriate moving and handling techniques
		15.9 know the correct principles and applications of disinfectants, methods for sterilisation and decontamination, and for dealing with waste and spillages correctly
		15.10 be aware of immunisation requirements and the role of occupational health