2026

Consultation Draft

CONTENTS

Disclaimer

The College of Radiographers (CoR) and The Royal College of Radiologists (RCR) have taken reasonable steps to ensure that the Quality Standard for Imaging (QSI) is suitable for use by providers of imaging services in the UK. However, no warranty is given, and—so far as permitted by law—neither the CoR nor the RCR accepts liability to any service provider or other party should the Standard prove not to be fit for that purpose.

Compliance with the QSI does not guarantee that a service provider will meet its legal obligations to third parties, including the proper discharge of any duty of care when delivering imaging services.

Introduction

The Quality Standard for Imaging (QSI) provides a framework against which services can measure and improve quality, ensuring high standards of patient experience, involvement, and co production. It sets out what constitutes a good imaging service. Services that demonstrate their alignment with the QSI are eligible to apply for the award of the QSI Quality Mark.

QSI 2026 has been developed through a rigorous review process and extensive consultation with professional colleagues including radiographers, radiologists, medical physicists, clinical technologists, sonographers, educators, and a patient advisory group. Extensive consultation with professional colleagues. The Standard has been reviewed for its applicability across UK nations.

Aim of the Quality Standard for Imaging

The QSI is designed to enhance the quality of care for people attending imaging services and to support the professional development and wellbeing of staff. It promotes best practice to improve patient outcomes and service quality.

The QSI is intended to help service providers improve the quality of care by setting a baseline expectation for performance. It can be used as a standalone tool for internal quality improvement, but its impact is greatest when embedded within peer review or formal quality assessment processes.

Services should aim to meet the Standard consistently, not only prior to assessment. Reviewers will expect to see well established, routinely applied processes rather than temporary measures. Achieving this requires a strong culture of quality, shared across all staff and supported by the service leadership team

Support and Assessment of QSI

The colleges QSI Quality Improvement Scheme provides services with structured support as they work towards meeting the Quality Standard for Imaging. This support is delivered through the QSI Hub, which offers guidance, resources, and tools for continuous improvement.

The Scheme also enables services to seek formal recognition through the QSI Quality Mark. This is achieved via a peer-review assessment in which a team of trained peers and lay assessors evaluates the service's performance and evidence against the QSI. Services that successfully demonstrate compliance with the Standard are awarded the QSI Quality Mark.

Scope

Imaging services are complex and diverse, bringing unique techniques, technologies, and professional practices. The XR quality standards can adequately describe quality across most imaging specialties. However, some modalities require additional, specific quality statements.

It is not the role or intention of the QSI to confirm a service's regulatory compliance. However, the Colleges will require evidence that all relevant regulatory requirements are being met in order to satisfy the quality statements.

The QSI applies to all procedures, examinations, investigations and reporting delivered by diagnostic imaging services, including those set in the community such as Community Diagnostic Centres (CDCs), mobile services and teleradiology providers. Some screening services follow their own quality assurance processes but may still fall within scope.

QSI 2026 also reflects the evolving landscape of healthcare, including technological advancements, the NHS net zero agenda, and recognition of the importance of service culture, staff wellbeing, sustainability, AI, and staff development.

Definitions

Patient

Throughout the QSI, the term patient refers to any individual attending for an imaging examination, investigation, or study. A person accompanying them for support is described as a carer, which includes patient representatives. The term service user may also refer to clinicians making referrals; therefore, patient and carer are used for clarity.

Clinician

Used broadly to refer to any appropriately qualified clinical professional, including radiographic and nursing staff, not solely medical practitioners.

Audit

A systematic process to evaluate and improve the quality of patient care by looking at current practice and modifying it where necessary.

Children and young people

The age definition of children and young people used in the service should be consistent with that used by the provider organisation

Guidance

Recommendations for best practice issued by reputable professional bodies. Guidance is not mandatory but reflects agreed professional standards.

Protocol

A document laying down in precise detail the tests or steps that must be performed. Agreed by the service or organisation, it provides direction for the healthcare professional. Note that within the Ionising Radiation (Medical Exposure) Regulations 2024 (IR(ME)R) the term 'protocol' has a very distinct meaning. In QSI, the term protocol is used in its non-IR(ME)R context.

Clinical Imaging Protocol

This refers to a standardised set of instructions for performing an imaging exam such as detailing how the images should be acquired

Policy

This sets out the service expectation and organisational mandatory requirements for areas of practice or approaches. A policy is formally agreed by the service or provider governance processes.

Pathway

A multidisciplinary description of a patient's journey for a specific condition. Multiple guidelines, policies, and protocols may sit within a single pathway.

Process

A series of actions or steps taken in order to achieve a particular result**.**

Standard operating procedure (SOP)

A document that sets out in a step-by-step approach the way the organisation expects a procedure, protocol or process to be followed.

Imaging procedure

Refers to the entire imaging process, from referral through to reporting, unless context indicates otherwise.

Understanding the QSI structure

The QSI is structured into several sections. The first section, prefixed by 'XR-' covers the standards applicable to all imaging services including all aspects of a general imaging service, planar imaging, fluoroscopy, theatre, mobiles, portables, dental, and DEXA.

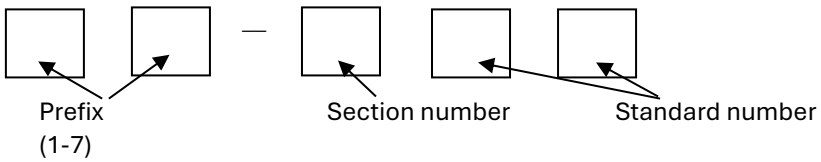
The following sections cover the five modalities which will also need to be met by any services providing imaging procedures within those modalities:

- Computerised tomography
- Interventional Radiology
- Magnetic resonance imaging
- Nuclear medicine and molecular imaging
- Ultrasound

Services should determine which quality standards are applicable to the scope of imaging they provide. For example, if a service does not deliver paediatric imaging, standard XR 704 may not apply.

Quality Standard Reference Structure

Quality standard reference numbers have the following structure:



Each standard is structured as follows:

Reference number (Ref)	This column contains the unique reference number for each quality statement and is used for all cross-referencing.
Quality standard (QS)	**Standard name** The name of the quality standard. **Quality statement** A high-level description of what 'good quality' looks like for this standard. **Outcome measure** Describes how achievement of the quality statement will be demonstrated. It defines the evidence expected to verify quality. **Suggestions** The suggestions offer a range of examples that may help you demonstrate how the quality statement and outcome measure can be achieved. They are not a mandatory or exhaustive set of requirements, and services are not expected to provide evidence for every suggestion when applying for the Quality Mark. Definitions of language used in suggestions: **Must**: a legislative requirement **Should**: Professional body or College guidance **Could**: A suggestion for quality improvement. *Notes:* *The notes give more detail about either the interpretation or the applicability of the quality standard. They are ordered as follows:* 1. *Notes for services* 2. *Notes for reviewers* 3. *Links to online webpages; regulations; guidance which could help services to meet the standard* 4. *Links to other QSI standards*

Sections

The quality statements are in the following sections:

Imaging Service Standards	
XR-1	**Patient information, support and experience**
XR-2	**Workforce**
XR-3	**Service operation and sustainability**
XR-4	**AI, digital technologies and data**
XR-5	**Radiation safety**
XR-6	**Equipment**
XR-7	**Guidelines, protocols and clinical safety**
XR-8	**Quality and governance**
CT/IR/MR/NM/US-9	**Modality-specific standards**

Return to Index

Quality Standard for Imaging

Ref	Standard

XR-1 Patient information, support and experience

Introduction

Imaging services should strive to deliver a high-quality experience that is both warm and welcoming, ensuring that every patient is treated with dignity, compassion and respect. All interactions and decisions should be guided by respect for patients' values and individual circumstances, ensuring that their voices shape the care they receive. Departments, should foster an environment where genuine partnerships with patients are prioritised, recognising individuals' values, preferences, and needs. This partnership approach should be embedded in all aspects of service delivery and policy development, ensuring that care is truly patient-centred and responsive to individual circumstances.

Patients attending for imaging procedures often feel nervous or anxious about the examination or potential outcomes. Given that referrals come from a range of clinical pathways, it is essential for imaging services to offer clear, comprehensive, and accessible information. This helps to reduce anxiety and empowers patients to participate fully in their care. Open, honest, and timely communication is essential. Staff should provide detailed explanations about procedures, answer questions, and address any concerns, supporting patients' understanding and engagement.

Services should actively involve patients in the design, implementation, and evaluation of imaging services. This collaborative approach ensures that improvements reflect the real needs and priorities of those using the service and that no individuals or communities are excluded. Practitioners must listen attentively to patients, acknowledge their concerns, and adapt care accordingly. This not only builds trust but also ensures that services are responsive and person-centred.

By embedding these principles into everyday practice and considering them in each of the quality standards in this section imaging services can deliver a consistently high standard of care, enhancing patient experience and outcomes.

XR-101	**Imaging service and procedure-specific information** **Quality statement** Patients and where appropriate, their carers, are offered information about each imaging procedure and investigation they are to receive and the service they are to attend. **Outcome measure** Patients confirm they have received sufficient information to support their understanding of their clinical procedure or investigation, and access to, the service, in a format and language they can understand. **Suggestions** • Information should be made available, when required, to all patient groups in a format and language they can understand. • Written information should be in clear, plain language and should be available in formats appropriate to the needs of the patients, including developmentally appropriate information for young people and people with learning disabilities. • The service can evidence that information is available in accessible formats and languages. Uptake and availability should be monitored. • Evidence should be provided of the information made available to patients and the process for its distribution or access. • Contact arrangements should be made for additional questions or information. • Services should regularly review patient information to ensure that it remains up to date and accurate. • Information should consider the following where applicable: a) The imaging services provided and organisation of the service, such as opening hours and modality-specific availability times (if different from standard opening times). b) Information about how to modify, change or cancel the appointment. c) Communication of appropriate expected waiting times. d) Logistical information about the site such as car parking and directions. e) Staff whom patients are likely to meet, staff roles and uniforms, and facilities available. f) How to contact the service for help and advice, including out of hours and aftercare (XR-102). g) A request for patients to inform staff if they are/may be pregnant or are breastfeeding. h) Radiation risks, including information for patients attending the service who are, or may be, pregnant or breastfeeding. i) How patients' data will be used, including information on how to opt out if they so choose. j) Preparation for the procedure. k) Staff who will be present at or who will perform the procedure. l) Benefits and risks relating to the procedure. Side-effects and aftercare information, if appropriate, for the procedure. m) How, when and by whom results will be communicated. n) How to complain. o) Where to seek informaiton and support should something go wrong.

Notes:

1. *This QS is about the format and content of the information given from the service to the patient. XR-102 and XR-107 cover in more detail the patient involvement in their treatment and care.*
2. *This QS is not only about the information provided but how the service has ensured that it is readable, accessible and usable for all patients. Services should test their information with diverse patient groups.*
3. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.*
4. *Services should consider the format to ensure equality, as well as to reduce digital exclusion and health inequalities. Information should be provided regardless of age, sex, gender, ethnicity or other protected characteristics. The service should consider how it addresses the needs of patients who are unable to read through sight loss or who are illiterate or deaf.*
5. *Monitoring could include translation requests, easy read use, large print requests, digital exclusion mitigations.*
6. *Information may be in paper or electronic format or made available on a website or through other digital technologies. Guidance on how to access information is sufficient for compliance so long as this points to easily available information of appropriate quality. If the information is provided only in individual patient letters, then examples will need to be seen by reviewers.*
7. *Ideally information should be written, although in some cases (for example same day referral) there may be insufficient time to provide a full range of written information.*
8. *In Wales, patient information and communication arrangements should align with the Welsh Language (Wales) Measure 2011, applicable Welsh Language Standards, and the 'More Than Just Words' framework, including the Active Offer. Information should be available that sets out how interpreting, translation, and Welsh language support can be accessed where required, including proactive offer where applicable in Wales - More than just words: Welsh language plan in health and social care \| GOV.WALES*
9. *Pregnancy information and risk should follow the latest professional body guidance and comply with IR(ME)R.*
10. *Procedure-specific information should cover both the stages before the procedure and, where relevant, the stages of the procedure.*
11. *This QS may link with XR-703 about consent procedures: the information should be appropriate to support patients in giving informed consent.*
12. *Information for young people should meet the standards set out in the following guidance Youre Welcome Establishing youth-friendly health and care services' guidance, June 2023 Department of Health and Sociall Security*
13. *In Wales, services should align with Putting Things Right arrangements and the organisational Duty of Candour framework under Welsh legislation and guidance.*
14. *Duty of Candour Regulations from the Health and Social Care Act 2008 ' in England;*
15. *Putting Things Right Raising a concern about the NHS in Wales . NHS Wales 2015*
16. *Organisational Duty of Candour: non-statutory guidance - revised March 2025 NHS Scotland.*

XR-102	**Contact for queries, support and advice** **Quality statement** Contact points within the service for queries, support and advice is available for each patient and, where appropriate, their carer. **Outcome measure** Patients and their carers can contact the service for queries, support, advice and aftercare. The service can demonstrate that all such enquiries are managed appropriately and within an agreed timescale. **Suggestions** • Evidence should be provided of the information made available to patients and the process for its distribution or access. Patients and carers have easy access or signposting to other services to support the personal and holistic needs associated with their care. • Information about other relevant services should be easily available. Leaflets and telephone numbers for these services maybe sufficient if they are available. • If advice and support is not immediately available, then the timescales for a response should be clear. • All contacts for advice, and a sample of actual response time, should be documented. Response times should be no longer than the end of the next working day or within an agreed, locally defined timescale proportionate to clinical risk, while keeping a recommended benchmark. • The service should be able to demonstrate that it meets the agreed response times. • There should be evidence of a clear process for obtaining feedback from patients and their carers. • Services should have appropriate contacts for different enquiries before, during and after an appointment such as booking, practical examination, benefits risks. These contacts may be admin, clerical, a healthcare professional or medical contacts. • Services should provide information about who to contact in case of emergency, including in and out of hours. • Services should consider methods of contact, digital contacts alone maybe insufficient. There should be two methods of contact route offered to patients. • Services should consider how they support patients who cannot navigate voicemail/automated systems. *Notes:* 1. *The requirement for a response by the end of the next working day doesn't necessarily mean that this response is by the health and/or social care professional involved but by the most appropriate contact.* 2. *Information may be combined with service information (XR-101).* 3. *Availability of support services should be appropriate for the patient population and needs of patients and their carers. The actual services available may be different in different areas.* 4. *Examples of other services to signpost to are:* a) Better Health - NHS b) Healthy living - NHS c) Healthwatch d) *Patient Advice and Liaison Service (PALS) or equivalent* 5. *Information should explain patients' rights under the NHS Constitution England; Patients' rights Wales; Patient Services Scotland; Department of Health NI*

	6. In Wales its Putting things Right - NHS Wales complaints and concerns: Putting Things Right | GOV.WALES; https://www.llaiswales.org/.

XR-103	**Respect and dignity** **Quality statement** Patients and their carers are treated with respect, and their dignity is maintained at all times. **Outcome measure** Patients and their carers confirm they have been treated with respect and that their dignity was maintained throughout their visit. **Suggestions** • A statement of intent by the service should guide the approach of staff within the service. A focus on person-centred care should be clear. • All staff who have direct contact with the patient or their carers should introduce themselves in a welcoming and friendly manner, using 'Hello my name is' and stating their position. • Staff should ask the patient how they would like to be addressed and record for future visits. • Name badges should be worn and be visible, in line with organisational policy. • Staff should make time to explain procedures to patients and to listen to their concerns. • The service should have a policy in place to describe how they manage the dignity of patients, both generally within the department and while undergoing examination. This should align with the organisational policy on respect and dignity. • The service should have in place an intimate examinations and chaperone policy. • The service has measures in place to maintain respect and dignity of individual patients including those patients who may require alternative arrangements such as the use of moving and handling aids. • Patients should be offered appropriate clothing that seeks to maintain their dignity while in any waiting area. • Gowns in various sizes and types should be available with sufficient stock. • Separate waiting areas should be available for patients who are dressed and for those who are either in night clothes or changed for examination. • There should be evidence of a clear process for obtaining feedback from patients and their carers about respect and dignity when attending the service and trends should be monitored. *Notes:* 1. *Meeting this QS is not about the presence or absence of a policy but rather about the culture of the service. (XR-202)* 2. *Records of how patients would like to be addressed should be recorded in line with information governance and only where relevant.* 3. *For certain groups of patients or procedures (for example children) who may be imaged in their own clothes, the use of gowns may not apply. The principles of dignity remain.* 4. *Evidence could be assured in a number of ways, including the IR(ME)R audits or Family and Friends Test (FFT).*

	5. *Accommodation and building constraints may make separate waiting areas not possible. The service should use screens, separate inpatient and outpatient lists or consider other measures to overcome this.* 6. *Intimate-Examinations-and-Chaperone-Policy - SoR CoR 2023.*

XR-104	**Privacy and security** **Quality statement** Patients' privacy and security are maintained at all times. **Outcome measure** Patients and their carers confirm their privacy and security have been maintained. **Suggestions** • The service should have a policy in place to describe how they manage the privacy and security of patients, both generally within the department and while undergoing examination. This should align with organisational policies. • Services should consider the privacy needs for patients at higher risk including discreet communication and safe waiting arrangements where feasible. • A policy should be in place to describe security arrangements for both patients and their belongings. • The service should be able to demonstrate that patients and their carers confirm their belongings have been secure during their visit. • This quality statement also relates to security of patient data. • There should be evidence of a clear process for obtaining feedback from patients and their carers about privacy and security when attending the service and to monitor trends in feedback and complaints. • There should be an area/room available for patients who require a private conversation with staff. *Notes:* 1. *Higher risk patients may include: domestic abuse risk, safeguarding concerns, trans patients, patients with learning disability.* 2. *Accommodation and building constraints may make separate waiting areas not possible. The service should use screens, separate inpatient and outpatient lists or consider other measures to overcome this.* 3. *Reviewers should visit/enquire about restricted access to areas where patients may not be fully clothed or have left personal possessions.* 4. *Reviewers should consider the arrangements for the safe and secure storage of valuables, clothing and personal belongings during examinations and procedures. Note that possessions that are valuable to patients may not have a monetary value.* 5. *Reviewers may want to consider arrangements for CDCs, satellite and mobile units regarding security of patients and personal belongings.* 6. *Reviewers will want to understand how the service has assured itself that the measures taken are sufficient to maintain the privacy and security of individual patients, including patients who may require alternative arrangements.*

XR-105	**Environment** **Quality statement** The environment is welcoming, suitable and safe for all patients and their carers. **Outcome measure** Patients and their carers can confirm that the environment is welcoming, accessible, safe, and suitable. **Suggestions** • Patients should feel safe on entering the environment. This may include posters welcoming patients and assuring them of the organisation's commitment to be free from discrimination. • The environment should consider individual patients' needs including those patients with additional requirements (XR-106). • The service should ensure safe transport of patients. • The service should ensure accessibility for wheelchairs, trolleys, beds etc. • There should be accessible and appropriate signage. • Suitable toilet facilities should be available to meet patient's needs. • There should be suitable arrangement for people using mobility aids, visual impairment and other additional needs. • Suitable environment for children and young people. • The service should consider how the environment in all locations is suitable for all groups of patients and carers. This could include sensory colour scheming and lighting. • There should be evidence of a clear process for obtaining views and input from patients and their carers. *Notes:* 1. *Suitability of facilities is not strictly defined but should consider inclusive facilities such as breast-feeding space, quiet space, appropriate flooring, rooms for confidential conversations, and facilities for people with disabilities.* 2. *Some services can be provided in facilities that may include aged estate and space constraints. Reviewers will want to understand how the service has adapted its environment to meet this QS. The organisation's risk register should show how the service is mitigating problems with the facilities.* 3. *In services for which a response to an urgent situation has required temporary facilities or arrangements, reviewers will need to consider whether the service has taken reasonable measures to meet this QS. Reviewers will want to consider that the longer a 'temporary arrangement' continues, the greater opportunity the service will have had to meet this QS.* 4. *New facilities should be compliant with the latest Health Building Notes published by NHS England* 5. Health facilities publications and guidance | National Services Scotland

XR-106	**Imaging support for patients** **Quality statement** Processes are in place to support the imaging needs for all patients inclusive of those with additional requirements. **Outcome measure** Patients can confirm they have been supported during their experience with the imaging service. **Suggestions** • All patients should be treated as individuals with their needs met. The service should recognise that additional requirements may cover a wide range of patients. • Services should adopt an all-inclusive approach where all patients are informed and empowered to identify and request arrangements to meet their needs, where appropriate. • Patients must receive comprehensive support throughout their entire imaging journey. • There should be a process for adapting appointment times for any additional needs, where known in advance. • Arrangements in place that allows patients to confidentially communicate their need for additional support to staff. • Staff training to recognise the need for support for patients with additional requirements. • Any adjustments identified are recorded and documented for future visits to enhance patient experience. • A range of communication aids, including translation services, are available to enable patients to participate in decisions about their care. • The service should provide additional aids for reasonable adjustments. *Notes:* 1. *Additional requirements are defined as additional support needs and reasonable adjustments, spanning disability, neurodivergence, language needs, sensory needs, trauma history, dementia, and anxiety.* 2. *Additional aids could include physical and communication aids including; hearing loops, picture or symbol cards, large-print information, visual impairment aids (such as screen readers, braille, or other tactile communication systems), access to sign language interpreters, play therapy, translation services, stress ball, quiet/private rooms, and wheelchair access.* 3. *Reviewers should enquire as to how patients are made aware of additional support and the possibility of accessing them in advance of them being required. A recognition that patients with additional requirements may not always be identified in advance.* 4. *Reviewers should ask how these processes have been developed, and especially whether this has been with the engagement of patients.* 5. *Reviewers should enquire about services adherence to the duty of candour when adverse events occur.* 6. *Translation service which may be via telephone or digital access as appropriate.* 7. *Equality Act 2010* 8. *The Oliver McGowan Mandatory Training on Learning Disability and Autism | NHS England | Workforce, training and education* 9. *NHS England » The Reasonable Adjustment Digital Flag action checklist: what you need to do to achieve compliance* 10. Digital inclusion Wales - https://www.gov.wales/digital-inclusion

XR-107	**Patient, carer and service partnerships** **Quality statement** Patient partnerships with the service are used to design and improve future care and service provision. **Outcome measure** The service can demonstrate changes, at an appropriate and proportional level, that have been made as a result of patient partnerships and other patient feedback received. **Suggestions** • A policy on patient and service partnerships should be in place. • The service should demonstrate a move towards co-production, rather than limited involvement to seek patient approval. • The policy should have: a) Mechanisms for receiving regular feedback from patients and carers about the treatment and care they receive. b) Mechanisms for involving patients and carers in decisions about the organisation of the service. c) A process for involving patients in service design. d) A process for providing information to patients on changes as a result of feedback received. • There should be a clear patient complaints procedure, which also details follow up and actions. • The service should regularly review and, where appropriate, audit responses to patient feedback. *Notes:* 1. *The service may rely on the organisation's policy on patient and service partnerships as long as this is relevant to the service.* 2. *Patient partnership activity should include under-served groups (e.g., people with disabilities, ethnically diverse communities, people with low health literacy, non-English speakers) and services should evidence how they avoid tokenism such as feedback loops, "you said, we did," accessible participation options, reimbursement where appropriate.* 3. *Meeting this QS requires more than undertaking a regular patient survey and should focus on engagement with patients and their carers, leading to improvement. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 4. *Reviewers will want to look at the process, along with the results/outcomes.* 5. *The arrangements for receiving feedback from patients and carers may involve surveys, including the national patient survey, focus groups and/or other arrangements. They may also involve provider-wide arrangements, as long as issues relating to the specific service can be identified.* 6. *There should be examples of proportionate changes made as a result of the feedback and involvement of patients and carers.* 7. *There should be evidence of a clear process for obtaining feedback from patients and their carers.* 8. *Reviewers will want to consider whether the changes are sustainable.* 9. *Reviewers will want to consider the frequency of patient engagement processes.* 10. *Reviewers should enquire about leadership of patient and public involvement within the service.* 11. *Patient Safety Commissioner Annual Report 2024-25* 12. *Patient Public and Practitioner Partnerships within Imaging and Radiotherapy: Guiding Principles. Society of Radiographers*

	13. A healthier Wales: long term plan for health and social care, Welsh Government 2025. 14. The Ladder of co-production – Think Local Act Personal

Ref

XR-2 Workforce

XR-201	**Service leadership** **Quality statement** The leadership of the service, including all key areas, is identified. **Outcome measure** There is an organisational structure with named individuals who hold leadership roles in all areas. **Suggestions** • An appropriate management structure for the service delivery model in the organisation should be Xin place. • A well led service is a collaboration between the clinical medical leads and operational and professional leads. • Named relevant service leads and clinical medical leads for each modality and area of service provision such as PACS and IT etc. • Leads should also be identified for non-clinical roles such as Equity, Diversity, Inclusion, and Belonging (EDIB) lead, Health & Safety, Wellbeing, Sustainability etc. • There must be job descriptions for the roles and the responsibilities of the leadership posts. A summary of the responsibilities should be agreed with the individual lead. • Imaging services should have a medical lead, a relevant healthcare professional lead and a service manager (or equivalent) with responsibility for staffing, training, guidelines and protocols, service organisation, professional standards, governance and liaison with other services. • Staff should know and be able to access the senior leadership structure and who the leads are for each of the areas. • Changes within the leadership should be well communicated. • There should be an accessible and publicly available organisational structure. *Notes* 1. *The clinical medical lead must hold statutory registration as required for their professional title.* 2. *The service lead/lead professional is usually an HCPC-registered radiographer or equivalent, responsible for the entire service. Clear accountability for professional standards, including reporting to the HCPC or other relevant regulator and updating in line with professional body guidance, should be established. When the lead professional is not from the same professional background as the staff they supervise, there should be clear accountability for applicable professional standards.* 3. *Non-statutory regulated imaging professionals, for example sonographers or nuclear medicine technologists, may undertake the role of service lead. In this case, professional reporting for HCPC registered staff should be clear.* 4. *Some leads may not be under the radiology management structure (for example the lead for medicines management). They should still be identified on the organisational chart.* 5. *Leads may have responsibility for more than one area. If so, reviewers should enquire whether the postholder has sufficient capacity to provide leadership in multiple areas.*

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	6. *Organisational charts should show reporting and accountability*. 7. *Reviewers will want to enquire how all roles link to measureable goverence frameworks*. 8. *Reviewers will want to ensure that the lead has sufficient training, education and experience for the role. The reviewers might enquire about the professional development of leaders in the service including radiologists and other medics as appropriate*.

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XR-202	**Service culture** **Quality statement** The imaging service fosters a positive, inclusive, and people-centred culture that prioritises quality, safety, respect, and continuous improvement in all aspects of service delivery. **Outcome measure** Staff confirm that the service culture actively supports open communication, collaboration, continuous learning, and a shared commitment to a compassionate culture that delivers excellent care. **Suggestions** • A positive culture should be fully embedded in everyday practice, rather than limited to policy documents or isolated initiatives, and should demonstrate compassionate and inclusive leadership. • A documented service culture statement or policy, that promotes diversity, inclusivity, engagement, innovation, professionalism and outlines the values and behaviours expected within the service. • Evidence of leadership commitment to modelling and promoting the desired culture, with a specific focus on compassionate behaviours, civility, learning and support for staff wellbeing. • Regular staff training and development programmes focused on professionalism, values, behaviours and fostering a culture of learning and growth. • Mechanisms for staff to provide feedback on service culture and suggest improvements. • Recognition and celebration of positive behaviours, teamwork, learning achievements, and staff contributions to an inclusive culture. • The service should promote a psychological safe space for staff to freely express their views, ideas and concerns. • Integration of service culture principles and, promotion of a one team culture into recruitment, induction, appraisal, staff development, and retention strategies. • Regular evaluation of service culture—using surveys, focus groups, and other engagement activities—with findings used to inform continuous improvement and staff retention efforts. Notes: 1. *The service culture statement should align with the wider organisation's values and strategic objectives, with emphasis on compassionate leadership and learning.* 2. *Service culture must be inclusive of all staff, trainees, learners, patients, and carers, regardless of background or role.* 3. *The long-term ambition is to be able to evidence sustainable improvements in staff morale, retention, development, and patient satisfaction linked to service culture and compassionate leadership.* 4. *Reviewers should consider how this QS is evidenced, this may include: turnover/retention trends, sickness data themes, exit interview learning, speak-up themes, civility/behaviour standards adoption.*

XR-203	**Staff wellbeing** **Quality statement** Staff are supported in their work by the organisation and their colleagues. **Outcome measure** Staff confirm they are supported at work, and their wellbeing is positively encouraged. **Suggestions** • The service should have a range of measures in place, which are accessible and inclusive, including (but not limited to): a. Pastoral care initiatives b. Ensuring staff are able to take regular rest/refreshment breaks with suitable facilities such as staff rooms c. A range of staff support programmes d. Access to work-based mental and physical health services e. Support systems in place following incidents and accidents f. Champion roles such as wellbeing and freedom to speak up g. Support for homeworking and remote working reducing the risk of professional isolation h. Consideration for sexual safety in the workplace • There should be a programme of support for staff who report bullying, harassment or significant peer pressure. There should be a process for managing perpetrators of bullying and harassment. • Services should demonstrate that staff can access support confidentially. • Services should demonstrate a commitment to supporting equity, diversity and inclusion. Reasonable adjustments considerations are in place where required. • Services should ensure a psychologically safe environment. • Services should monitor the effects on wellbeing of shift patterns, out of hours working and high demand areas. • Wellbeing plans should be implemented where needed. • There should be regular one-to-one meetings, personal development plans and appraisals. • There should be regular feedback, including: a. Regular departmental surveys b. Organisational surveys c. A clear mechanism for staff to raise concerns (such as a freedom to speak up guardian) • There should be support for learning and professional development. • There should be regular team communications, including team meetings, interdisciplinary and other forms of communication e.g. staff newsletters, posters etc. • The service should ensure that staff are trained to recognise indicators of stress and burnout, and staff management roles should monitor sickness levels and provide support for staff returning to work. • A review of the staff response to the outcome measure should be considered by the service management team.

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	Notes: 1. *This QS cannot be met by an organisational survey alone unless the questions within the survey are service-specific and links to XR-202, service culture. It is related to the service leadership and culture. Services should encourage compassionate leadership and kindness.* 2. *Genuine inclusion requires proactive, personalised support to address workplace stressors that disproportionately affect neurodivergent colleagues.* 3. *Facilities should be appropriate to the service setting and accessible for all staff needs.* 4. *There should be a policy on homeworking detailing where and when this is possible.* 5. *Governance arrangements for homeworking may be in the wider organisations' homeworking policy but should also include details to address the viewing of clinical images away from the work base.* 6. *The questions in the staff survey should be designed to elicit staff views regarding the support that they receive.* 7. *There should be evidence of any actions were taken as a result of staff survey feedback.* 8. *Reviewers will want to enquire how the process of staff raising concerns ensures confidentiality and encourages people to use this channel of communication.* 9. *Care is not just for the patient RCR support and wellbeing report 2021* 10. *Homeworking for radiologists RCR 2023*

XR-204	**Staffing levels and skill mix** **Quality statement** Sufficient staff, with appropriate competences, are available for the anticipated number of diagnostic and interventional procedures for the usual case mix of patients within expected timescales. **Outcome measure** The service can demonstrate that the required skills, competences and capacity match the demand requirements of the service. **Suggestions** • An appropriate skill mix of staff should be available, including medical, radiographic, sonographic and nursing staff, clinical support workers, admin staff and other staff required to deliver the range of diagnostic and interventional procedures offered by the service. • A clear methodology should be used to determine appropriate staffing levels and skill mix. • Cover for absences should be available so that the patient pathway is not unreasonably delayed and patient outcomes and experience are not adversely affected when individual members of staff are away. • Staffing and skills mix should take into account: a) The number of patients, and the usual case mix cared for by the service including supporting equitable access where patients require reasonable adjustments b) Job planning c) The service's role in the patient pathway and expected timescales d) Hours of operation e) Transfer of care to other services • Considerations should include annual leave, mandatory training, study leave/professional development and a recognition of sickness absence, compassionate leave and maternity/paternity leave. • The service should be able to demonstrate how the current establishment enables these levels to be achieved in all areas. Demand and capacity reviews should be regularly refreshed within the current requirements of the service, including the requirement for bank, temporary or outsourcing staff. • A business continuity plan should detail how the service will respond to issues of staffing availability when this QS is not met. This should include contingency and escalation plans. *Notes:* 1. Staff should have time allocated for their role in the service, this should be reflected in a job plan for all staff. 2. This QS relates to the safe delivery of services. Where organisations are unable to meet their full staffing establishments, assessment and mitigation of risk should be recorded in the risk register. 3. Expected timescales for the patient pathway should be similar throughout the week, including weekends. 4. Healthcare support workers should normally have, or be working towards, relevant qualifications. Skills for Health competence frameworks may be helpful in defining appropriate competences. 5. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.

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	6. Reviewers may want to consider how roles which are part-time, outsourced or shared with other services are managed. 7. Reviewers should consider whether latest guidance of the relevant professional college on determining staffing levels has been implemented. 8. *Clinical radiology job planning guidance for consultant and SAS doctors 2022, RCR* 9. *Principles-of-Safe-Staffing-for-Radiography-Leaders, SoR 2024* 10. *SoR Support Worker and Assistant Practitioner (SWAP) Resource Hub | SoR* 11. *Developing Workforce Safeguards*;Supporting providers to deliver high quality care through safe and effective staffing NHS Improvement 2018 12. *NHS Long Term Workforce Planngland 2023* 13. *The Kings Fund, Workforce Planning in the NHS 2015* 14. *Workforce burnout and resilience in the NHS and social care* 2021 –2022 report House of Commons 15. *NHS Education for Scotland | NES training for HCSW and Assistant Practitioners*

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XR-205	**Administrative and clerical support** **Quality statement** Administrative, clerical and data collection staff are available to support and enhance all the functions of the service. **Outcome measure** The service can demonstrate an appropriate level of trained administrative and clerical workforce to support clinical functions. **Suggestions** • The service should be able to demonstrate a staffing structure for the service's administrative needs. • The service should be able to demonstrate how its current administrative and clerical establishment provides sufficient support for the service's clinical function in all areas appropriate for the service operational hours, this may include 24/7 support. • Records of induction and training (statutory, mandatory and role-specific) should be kept by the service. • Adequate support staffing should be available for all other operational functions, this may include: PACS, RIS, business analytics, KPI monitoring, AI, in addition to service administrative roles. *Notes:* 1. *The amount of administrative, clerical and data collection support is not defined. Clinical staff should not, however, be spending unreasonable amounts of time on administrative tasks.* 2. *Reviewers should note if the service is affected, such as delayed appointments, by a lack of admin staff or lack of suitable skills within the admin team.* 3. *Reviewers should enquire about the extent to which clinical staff receive the necessary administrative support required for providing effective care.* 4. *Reviewers will want to ensure that the admin staff are trained in all aspects of the radiology service relevant to their job description.*

XR-206	**Staff development** **Quality statement** The imaging service ensures that all radiology staff have access to structured, ongoing professional development opportunities that support career progression, skill enhancement, and adaptation to evolving clinical practice. **Outcome measure** Staff confirm that they have access to an individualised development pathway, regular opportunities for professional growth, and support for participation in continuing education for their professional development. **Suggestions** • A documented staff development policy, reviewed annually, outlining available development pathways for all roles (clinical, technical, support, managerial and leadership). • Individual development plans for each staff member, created in partnership with line managers and reviewed at least annually. • Support for staff to attend conferences, training, workshops, and professional meetings. • CPD protected time for staff. • Opportunities for all staff to participate in research, audit, and quality improvement projects. • Fair access for all, promoting inclusivity and catering to diverse learning needs. • Mentorship and coaching programmes for new and existing staff. • Mechanisms for staff to provide feedback on development needs and opportunities. • A preceptorship programme should be in place to support both newly qualified staff and those new to a role. • A professional supervision framework should be in place for all staff throughout their employment to ensure their development and progression. *Notes:* 1. *This QS is not solely covered by the annual appraisal scheme.* 2. *The staff development policy should be aligned with the wider organisation's workforce strategy and reflect national guidance from professional and regulatory bodies.* 3. *Development opportunities should be accessible to all staff, including those in part-time, locum, or remote roles.* 4. *The service should regularly review the effectiveness of staff development programmes and adapt them to changing clinical, technological, and regulatory requirements.* 5. *Staff development should be linked to succession planning and talent management within the service.* 6. *The service should demonstrate how feedback from staff informs the evolution of development programmes.* 7. *Reviewers should look for evidence of sustainable improvements in staff skills, retention, and satisfaction as a result of development initiatives.* 8. *Education and Career Framework (fourth edition) College of Radiographers* 9. *The Royal College of Radiologists Mentoring Schemes* 10. *The Society of Radiographers Leadership Mentoring Scheme* 11. *Transforming Roles paper 9 - allied health professions advanced practice: equality impact assessment. The Scottish Government*

	12. Radiographer Advancing Practice - *Futures NHS Collaboration Platform which provides a safe workspace for Radiographers at all stages to share knowledge and experience, with links to useful professional resources and forums to support all existing and emerging areas of enhances, advanced and consultant practice.*

XR-207	**Service competences, education and training** **Quality statement** A competence framework is in place defining roles, education and training required within the service. **Outcome measure** The service can demonstrate how, collectively, the competence, education and training of all staff is linked to the needs of the service. **Suggestions** • A competence framework should be in place for all staff (both clinical and support staff). This should include a matrix of the roles within the service, the competences expected and the approach to maintaining competences. • There is a record that shows that staff have the range of competences required for the roles and tasks that they are expected to undertake. • For medical and professional staff this should include recording CPD and revalidation requirements. • A training and development programme should ensure that all staff have, and are maintaining, these competences. • Requirements for Statutory and Mandatory Training should be completed and recorded for all staff, see note 4. • Services should maintain appropriate competence and training records for all staff (including those in substantive and locum roles, and those in training), demonstrating the attainment and maintenance of competence in the following aspects of safety as appropriate to their role, this could include: a. Ionising radiation awareness, including IR(ME)R, IR(ME)R (NI) 2024 and the Ionising Radiation Regulations 2017 (IRR), (IRR(NI)17) b. MR safety c. Drugs and medicines d. Hazardous substances e. Medical devices, including use of specific ablative and therapeutic devices f. Human factors g. Artificial intelligence h. Consent, mental capacity and deprivation of liberty safeguards i. Information governance, including ensuring confidentiality of patient information and images *Notes:* 1. *The service should detail all those roles that assure the safe and effective delivery of the service.* 2. *This QS is about the needs of the service and cannot be met solely by individual staff appraisals and personal development reviews (PDRs).* 3. *Training may be delivered through a variety of mechanisms, including e-learning, provider-wide training and departmental training.* 4. *Statutory and mandatory training may be found in provider-wide systems.* 5. *Competence in MR safety awareness should be maintained regardless of whether the person's role routinely takes them into the MR unit. All staff in a service in which MR is provided should have a basic MR safety knowledge. Reviewers should enquire about how this is managed.* 6. *Reviewers may request information about specific aspects of relevance to the service, particularly where a therapeutic intervention or activity is undertaken rarely*

	and/or where competence may not be maintained by the individual's usual clinical practice. 7. *Developing career pathways for diagnostic imaging support worker roles guidance on roles and responsibilities SoR and Health Education England* 8. *SoR The Radiography Support and Assistant Workforce: regulatory compliance, governance arrangement, supervision and delegation. 2023*
XR-208	**Recruitment** **Quality statement** A policy exists for staff recruitment, onboarding and induction. **Outcome measure** The service evaluates its recruitment policy, onboarding and induction processes for all staff to ensure that new employees are successfully integrated. **Suggestions** • A policy and process should be in place for the recruitment and induction of all staff including temporary, bank, international recruits and trainees in rotational posts. This should include pre-employments checks such as right to work, professional regulation, employment history, references etc. • There should be clear documentation of the competences required for all roles • Services should ensure that for temporary staff they have evidence that they have the required competences, legal entitlement under IR(ME)R and human medicines regulations, this information should be recorded. • All staff need a clear onboarding process, with cultural integration included for international recruits. • Before an individual starts work the service should have the local induction in place. For agency, bank and locum staff a review of competence for the expected role in diagnostic and interventional procedures should be completed. • Records of induction, including the confirmation by the member of staff of that induction, should be kept by the service. • For temporary staff there should be a supervisory framework in place. • Onboarding goes beyond induction; it should incorporate strategies to help staff integrate into the service's culture and behaviours. • Services should consider initiatives to support integration for example a buddy scheme. *Notes:* 1. *A recruitment strategy may consider international recruitment and return to practice.* 2. *Reviewers will want to be aware of whether the provider organisation is mandating a number of vacancies be held as part of any cost improvement or headcount management process, and to understand the mitigation strategies employed to manage this.* 3. *Reviewers will want to see arrangements in place should staff from another organisation work for the service, for example covering interventional procedures out of hours whereby the staff and not the patients move across sites. Arrangement should include contracts, training and competence.* 4. *Society of Radiographers International Recruitment* 5. *Royal College of Radiologists Global Recruitment*

XR-209	**Supporting staff in training** **Quality statement** Staff in training within the service are supported by the service during their training programme. **Outcome measure** Staff in training confirm that the service and their colleagues support them during their training. **Suggestions** • Staff should be supported during training; this may include mentoring initiatives. • Educational leads should be identified for all staff. For professional staff there should be an appropriately educated and trained practice educator. There should be links with regional programme directors for radiologists in training. • The service should support a learning culture. • The culture should ensure that learners feel comfortable raising concerns, such as bullying or significant peer pressure. • Facilities should be available such as: a. Room/space for learning b. Protected access to IT c. Quiet areas for studying d. Training aids, see note 4 • There should be protected access to equipment and time for training/learning. • For learners new to the service or modality there should be appropriate orientation provided. • There should be clear links with training establishments where appropriate, including regional imaging academies, universities, deaneries and organisations initiatives. • Regular feedback should be obtained from people in training. *Notes:* 1. *This QS is designed to describe the support given by the service to people in training; it is not intended to address the quality of training or education received.* 2. *This QS is inclusive of all staff undergoing training, not only student radiographers and resident radiologists.* 3. *Feedback regarding training must be in a timely manner and any action taken must be followed up.* 4. *Training aids, as appropriate, such as virtual support simulation; physical aids (e.g., skeletons); stocks of images; online journals; virtual supports tools; e-learning etc.* 5. *Ultrasound Practice Educator Guidance SoR & NHSE, 2025*

XR-210	**Radiology events and learning meetings (REALM)** **Quality statement** Multidisciplinary radiology events and learning meetings are held. **Outcome measure** Staff can confirm that they supported to attend REAL meetings to enhance their education and learning. **Suggestions** • There is a need to maintain a clear separation between REAL meetings (focused on education and learning) and clinical governance processes, agreeing that REALM should not be conflated with governance or duty of candour requirements. • REAL meetings should foster a culture of openness, learning and create a psychologically safe environment. Services should support REALM attendees. • For attendance requirements and frequency of meetings the service should follow current RCR guidance, see note 6. • Reporting staff should be encouraged to submit both discrepancies and good spots for discussion. • Staff should be encouraged to record attendance for meetings for their CPD, learning and appraisal. • Reporting radiographers, reporting sonographers, consultant radiographers and trainees should participate in attending these meetings. • The meetings should consider a process of recording the outcome for each case, learning and action points, trends and confidential feedback, see note 4. • There should be a process in place for the management of discrepancies that have the potential to cause patient harm or alter patient management. *Notes:* 1. *Radiology discrepancy meetings should be part of the quality management system, XR-801.* 2. *Radiographers and student radiographers should be able to attend.* 3. *This record is an internal record for feedback, to enable peer to peer learning.* 4. *Not all discrepancies are errors. Not all discrepancies require a duty of candour process to be undertaken.* 5. *It is equally important to highlight excellent diagnoses.* 6. *Additional guidance on radiology events and learning meetings is given in the RCR Standards for Radiology Events and Learning Meetings (2020).* 7. *The 2021 Ombudsman report Unlocking Solutions in Imaging: working together to learn from failings in the NHS provides recommendations on learning from past events.*

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XR-3 Service operation and sustainability

XR-301	**Operational policy** **Quality statement** An imaging service operational policy is in place. **Outcome measure** The service regularly reviews the operational policy to ensure that it remains relevant, up to date and supports safe service delivery. **Suggestions** • The service should demonstrate that there is an operational policy in place that covers all the areas provided by the service. • The operational policy should support staff to work safely and effectively. • The operational policy should be accessible by all staff working within the service. • The policy could cover (relevant to the services being provided): a) Scope of Service b) Hours of operation c) Operational procedures such as referral process, demand optimisation, medicines management, consent, never events, duty of candour etc d) Staffing considerations such as induction, training and competencies etc e) Infection prevention and control f) User feedback such as incidents, complaints, compliments etc g) Business Continuity Plan h) Risk management i) Governance and regulatory requirements such as IR(ME)R, IRR, IT, AI, etc j) Health and safety including life support training k) Incidents management, response to serious untoward incidents (SUI) and major incident planning • When services are provided between or across different providers, the operational policy should make clear a common approach to partnership working through dual policies or a single agreed system. *Notes:* 1. *Compliance with this QS may sit within several documents; however, for compliance with this QS, where multiple documents are in use there should be a single document setting out how these individual documents relate to each other to ensure the effective operation of the service.* 2. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 3. *The operational policy should be a one stop shop of knowledge for managers and staff.* 4. *The service's response to a major incident should be consistent with the wider organisation's major incident plan. It may be part of the service's operational policy, or the wider organisation's major incident plan, or both. The response should consider the role of imaging in internal and external major incidents.*

	5. *This QS links with many other QSs. Reviewers should consider whether compliance has been achieved in other linked QS.* 6. *Reviewers should enquire how arrangements are detailed in the operational policy when, for example, a third-party provider is contracted to provide additional activity for the service.* 7. *NHS England revised 2018 Never Events policy and framework*

XR-302	**Support services** **Quality statement** Timely access is available to services that support the delivery of an effective imaging service. **Outcome measure** The service can demonstrate that delays or cancellations of patient appointments related to support services have been as low as reasonably possible during the preceding 12 months. **Suggestions** • 'Timely access' for each support service should be defined and agreed locally, where services set out minimum standards of responsiveness. The following services could be included: *see note 1* a. Cleaning b. Clinical sterile services c. IT support d. Linen supplies e. Medical devices support f. Medical records g. Patient transport h. Porters i. Security • The service should have a Service Level Agreement, contract or other measure of agreed response times with each external service provider. • The service should demonstrate monitoring systems to identify problems and trends. The service should ensure that any delays, inefficiencies and disruptions to patient care due to support services are escalated. There should be a process of accountability. • The service should have processes for regular analysis, including collecting, reporting and escalation of delays relating to waiting times and patient pathways. *Notes:* 1. *Where a support service is not used (for example if the service does not use clinical sterile services) then this should be excluded from the assessment.* 2. *Reviewers will want to enquire about the process for reporting delays by clinical and ancillary staff.* 3. *Reviewers will understand that some aspects of this QS fall outside the direct control of the service. Reviewers should enquire about the steps taken and the escalation processes where local agreement cannot be reached. Reviewers will want to assure themselves that there are ongoing efforts.*

XR-303	**Imaging facilities** **Quality statement** Imaging service facilities ensure all imaging and interventional procedures support patient and staff wellbeing and experience. **Outcome measure** The service can demonstrate that their facilities support the delivery of imaging and interventional procedures. **Suggestions** • Facilities should comply with all relevant regulations, standards and guidance. • Services should ensure for patients: a. Appropriate privacy, dignity and security for patients (XR-103 and XR-104) b. Appropriate facilities for both inpatients and outpatients, with space for each, XR105 c. Protection of other patients, staff and members of the public from radiation, radioactive sources and magnetic fields d. Sufficient space for undertaking each examination. This may be especially relevant in modalities (for example ultrasound) where both the imaging device and the patient support system are mobile e. Appropriate areas for children, young people and adults. Appropriate areas for individuals with additional needs f. Ventilation of the room, especially recognising that imaging suites are unlikely to have natural ventilation and that some equipment is heat generating g. Room lighting sufficient for the procedure, dimmable where required h. Facilities and equipment for scanning anaesthetised and ventilated patients (where this service is provided) i. Availability of resuscitation equipment for both children and adults j. Arrangements for patients to summon staff in areas that are not permanently supervised k. Areas for procedure preparation and consultation • Services should ensure for staff: a. Appropriate areas for staff including rest, toilets, changing facilities, catering facilities and areas for training and education b. Staff should have designated access to facilities able to receive and respond to electronic communication required to fulfil their role *Notes:* 1. *Some services can be provided in facilities that may include aged estate and space constraints. Reviewers will want to understand how the service has adapted its environment to meet this QS. The organisation's risk register should show how the service is mitigating problems with the facilities, link to XR-105.* 2. *Where facilities are on the risk register there should be a plan to rectify the situation as soon as possible.* 3. *This QS equally applies to teleradiology and mobile services providers.* 4. *Facilities include ancillary equipment.* 5. *Reviewers will want to consider physical space in relation to privacy and dignity.* 6. *Health Building Note 6 Volume1: Designing facilities for diagnostic imaging. NHS Estates, 2001.*

	7. *Health Building Note 6 Volume 2 PACS and Specialist Imaging NHS Estates, 2002.* 8. Facilities for diagnostic imaging and interventional radiology (SHPN 06 Part 1), National Services Scotland.

XR-304	**Moving and handling** **Quality statement** Staff are trained and competent in moving and handling. **Outcome measure** The service can demonstrate that staff are trained and competent in moving and handling and suitable equipment is available, safe and regularly maintained. **Suggestions** • A full range of equipment should be available either within the service, or available immediately on loan from another service. • Training should be in place to support staff in moving and handling techniques and the correct use of equipment. • The service should be able to demonstrate regular maintenance checks or servicing on all equipment in use may include review of use, maintenance schedules, physical inspections, batteries inspections. • Risk assessments for the use of moving and handling aids should have been undertaken. • Equipment to support the management of patients with additional needs should be available this includes patients with obesity and limited mobility. • Services may want to consider having a separate moving and handling equipment asset list to meet this standard and they may need to liaise with their 'Medical Devices Safety Officer' to ensure compliance. • Training should emphasise maintaining patient dignity and avoiding stereotyping such as assuming obese patients don't have a full range of movements. • Where services share equipment there should be clear, documented records of who services and maintains that equipment. *Notes:* 1. *Availability of moving and handling equipment is not specified in detail, but this availability should not unreasonably delay the patient pathway or the achievement of the expected timescales, XR-602.* 2. This QS does not specify what constitutes 'regularly'; service should decide the review intervals. 3. *Reviewers will want to obtain evidence of training and the availability of equipment.* 4. *Reviewers should visually check storage locations for ease and accessibility. They should check if there is the right equipment in the right place at the right time.* 5. *Reviewers will want to ensure that the use of moving and handling equipment is recognised in XR-207.* 6. *Reviewers should enquire whether the service receives advance notification of patients who require additional moving and handling equipment.* 7. *Bariatric Patients: Guidance and Advice for the Radiography Workforce. Society of Radiographers, 2013*

XR-305	**Health and safety** **Quality statement** The service is compliant with the Health and Safety at Work Act, and Control of substances hazardous to health (COSHH) regulations. **Outcome measure** The service can demonstrate a safe working environment that supports staff health and wellbeing. **Suggestions** • The service should have an annual report showing compliance with Health and Safety Regulations. • The provider's health and safety policy should be in use, with specific references to the service being provided. • There should be nominated lead person(s) responsible for health and safety compliance. • There should be a lead person in the service responsible for COSHH compliance. • The service should display information about health and safety in an accessible place. • The policy should include reference to lone working and homeworking. • The service should have a forum in place for reviewing risk assessments and reported incidents. This may be part of a wider organisational or service level process. • Mandatory training in health and safety should be up to date. • The service can show compliance to COSHH regulations through the use of COSHH assessments. • Information on a) actions in the event of a fire, and b) access to first aid, should be identified and visible. • Risk assessments should be in place and should include (but not be limited to): a. Moving and handling b. Work-related musculoskeletal disorders (especially in relation to ultrasound (US-801)) c. Display screen equipment d. Ergonomics e. Lone working f. Remote/home working g. Electrical safety h. Stress i. Physical and verbal aggression j. Slips, trips and falls k. Specific risks associated with imaging procedures l. Pregnant employees • Formal risk assessments should be undertaken by staff trained in their use. • There should be a process for updating formal risk assessments following service change or undertaking new assessments on the introduction of a new service. • The service should have an audit plan in place for agreed key elements that are not measured by other means.

	Notes: 1. *Compliance with health and safety regulations will not be subject to detailed review. Compliance with this QS will demonstrate how the service has assured itself, the employer and the wider organisation that it remains compliant with national regulations.* 2. *This QS may be met by a separate imaging department policy so long as this is consistent with the provider's health and safety policy.* 3. *There may be multiple roles, however it should be clear to all staff who takes responsibility for each element of H&S.* 4. *The health and safety requirements should be consistent with the staff wellbeing and governance requirements in these QSs.* 5. *Reviewers will want to enquire about actions taken following incidents.* 6. This QS (COSHH) will have a specific relevance to MR phantoms and nuclear medicine and molecular imaging. Reviewers will want to be assured that these specific areas are compliant 7. *Health and safety and pregnancy in clinical imaging and radiotherapy departments: A guide for pregnant and breast / chest feeding employees, SoR, Revised 2022* 8. *Health and Safety Executive website*

XR-306	**Infection prevention and control** **Quality statement** A policy on infection prevention and control (IPC) is in use. **Outcome measure** The service can demonstrate that the IPC policy is followed consistently. **Suggestions** • The IPC policy should cover: a. Cleaning equipment and the environment b. Frequency of cleaning c. Record-keeping and/or use of visual indicators d. Imaging of patients with suspected or confirmed contagious and communicable diseases and/or suppressed immune systems, including patient care before, during and after imaging e. Decontamination of equipment and environment following use by patients with suspected or confirmed contagious or communicable diseases f. Routine cleaning and deep cleaning g. Occupational safety/managing prevention of exposure, including sharps and use of appropriate personal protective equipment (PPE) h. Safe management of blood and bodily fluids • The policy should be consistent with, and may be part of, the wider organisation's (if applicable) infection control policy. • The policy should have been approved by the director of infection prevention and control (or equivalent). • The service should have a dashboard of key IPC metrics that inform its regular review. • Mandatory IPC training compliance should form part of the key metrics. • Arrangements for undertaking observational audits for IPC assurance should be in place. *Notes:* 1. *The lead for infection control may be from outside the service.* 2. *Reviewers will want to identify that the guidelines cover both individual patient measures and measures to be taken in the event of an outbreak within the service/wider organisation.* 3. *Reviewers should enquire as to the responsibilities where equipment is used across teams.* 4. *Reviewers should enquire about assurances that IPAC findings are communicated to the service.* 5. *Reviewers will want to enquire about the communication processes between the service lead for IPC and the wider organisation's IPC lead (if applicable).* 6. National infection prevention and control NHS England, NHS Improvement (webpage) 7. National Infection Prevention and Control Manual | National Services Scotland 8. *National standards of healthcare cleanliness 2025* NHS England

XR-307	**Outsourcing and insourcing** **Quality statement** The quality of outsourcing and insourcing should ensure patients receive outcomes equivalent to those expected from the core service. **Outcome measure** Policies and contracts for both insourcing and outsourcing should be documented, monitored and reviewed. **Suggestions** • Contracts must clarify responsibility registration and regulatory compliance, such as the CQC requirements. • Where outsourcing or teleradiology services are employed, consideration should be given to how duty holders across the patient pathway are trained and entitled and by whom and whose employer's procedures they are working under. • Services should prioritise both short-term and long-term impacts when considering outsourcing or insourcing. • Financial oversight, service level agreements (SLAs), and contracts should be maintained, reviewed and monitored. • Resources should be managed efficiently to avoid waste. • Outsourcing and insourcing should be considered at the network level where appropriate. • There should be documented processes for managing critical findings, this should include a mechanism for tracking reports. • There should be a process to gather and manage complaints and incidents involving insourcing and outsourcing. **Outsourcing** • Outsourcing policies should specify what and when to outsource, including thresholds and suitable providers. • The required training and competencies for outsourced reporters should be defined. • The scope of outsourced work, especially for specialist reporting, must be specified. • Outsourcing companies should have transparent and comparable audit processes. **Insourcing** • Insourcing policies should clarify when and how much to insource, pay rates, HR considerations, wellbeing, and documentation of supporting professional activities (SPA). • Rotas and SPAs should be defined for insourced staff. • Additional training requirements for insourced staff should be assessed and addressed. *Notes:* 1. *Standards for interpretation and reporting of imaging investigations, third edition. The Royal College of Radiologists 2025* 2. *Standards for the provision of teleradiology within the United Kingdom, Second edition. The Royal College of Radiologists 2016*

XR-308	**24/7 service provision** **Quality statement** Staff with required competences are available to provide 24/7 service provision where needed. **Outcome measure** The service can demonstrate it meets the staffing and competency requirements for 24/7 service provision for imaging and interventional procedures. **Suggestions** • The service should specify core, non-core, on-call, out-of-hours, and extended hours shifts to ensure full 24/7 coverage suited to the demand and case mix. • The service should be able to demonstrate a staffing rota with appropriate skill mix and adequate support staff, mapped to the required competences, see note 2. • Challenges with meeting 24/7 requirements should be recognised on the service risk register and consideration for a business case/audit to demonstrate requirements. • Urgent requests include advice, review of previously obtained images, and carrying out and reporting urgent examinations. • A business continuity plan should detail how the service will respond to issues of staffing availability. This should include contingency and escalation plans. • Competences for emergency work should be maintained through appropriate continuing professional development and/or daytime job-planned work. • The service should have a process in place for using outsourced teleradiology services to ensure equity of provision. • On-site staff have access to rest facilities when working on-call/overnight. *Notes:* 1. *The purpose of this QS is to ensure there is adequate and equitable provision 24/7 where required.* 2. *Support services include all requirements including portering, nursing, transport, administration and clerical.* 3. *Staffing should be consistent with the guidelines on access to a network (if applicable), or more specialist services pathways and with condition-specific guidelines, and input to multidisciplinary team meetings.* 4. *Reviewers will want to consider percentage fill rates for shifts and will focus on average fill rates rather than individual shifts.* 5. *Reviewers will want to be assured that the process demonstrates that effective mitigation is in place.* 6. *Reviewers will want to ensure that patterns of work support staff wellbeing.* 7. *Guidance on Out of Hours Working and your Personal Scope of Practice, SoR, 2013* 8. *Compensatory Rest Guidance, BMA, 2022* 9. *Compensatory rest for Agenda for Change staff undertaking on-call duties* 10. *The Working Time Regulations 1998 Gov.UK*

XR-309	**Sustainability - energy efficiency** **Quality statement** The imaging service demonstrates a proactive and systematic approach to energy efficiency and sustainability, minimising environmental impact while maintaining high-quality patient care. **Outcome measure** The service considers and plans the implementation of an energy efficiency and sustainability strategy. **Suggestions** • A documented Sustainability Strategy for the department or the wider service, regularly reviewed and updated, outlining objectives, actions, and monitoring processes for energy efficiency and environmental impact. • Appointment of a Sustainability Champion or equivalent lead, within the department to lead, coordinate, and advocate for energy efficiency and sustainability initiatives. • The service should work towards demonstrating measurable reductions in energy consumption, waste, and carbon emissions. • Regular review and optimisation of workstations, lighting, and heating systems to ensure energy-efficient operation, including use of LED lighting, occupancy sensors, and smart heating controls. • Training and education for all staff on energy efficiency, sustainability practices, and the environmental impact of imaging services. • Commitment to a paperless, free, and light working environment, including digital documentation, electronic communication, and minimisation of unnecessary printing. • Participation in or establishment of a Net Zero Team to drive progress towards organisational net zero carbon targets, with clear reporting lines and accountability. • Services should encourage active engagement of staff and patients in sustainability initiatives. • Review of patient information formats to ensure materials are provided digitally where possible, reducing paper use and supporting accessibility. • Inclusion of referral management considerations and clinical decision support tools to reduce inappropriate imaging, thereby avoiding unnecessary energy consumption and resource use. • Prioritisation of digital solutions (e.g., cloud-based systems, energy-efficient IT infrastructure) to reduce power consumption and paper use, with regular review of digital practices for further optimisation. • Regular review and feedback mechanisms to monitor progress, identify further opportunities for improvement. *Notes:* 1. *The sustainability strategy should align with the wider organisation's environmental policies and national guidance.* 2. *Services should endeavour to support the Sustainability Champion role.* 3. This QS does not specify what constitutes 'regularly'; service should decide the review intervals. 4. *Consideration should be given to the environmental impact of equipment procurement, maintenance, and disposal.* 5. *Patient and staff engagement is essential for successful implementation.* 6. moving to digital/paperless must not increase **digital exclusion** i.e., keep alternative accessible formats available and evidence how equity is protected while reducing waste. 7. Delivering a 'Net Zero' National Health Service NHS England 2022

	8. *Home | Sustainable Healthcare Networks Hub* 9. *Green Healthcare Scotland. The National Centre for Sustainable Delivery* 10. *This standard links to AI and digital data storage.*

XR-310	**Sustainability - equipment, procurement and waste management** **Quality statement** The imaging service adopts a circular economy approach to equipment procurement and waste management, prioritising sustainability, responsible sourcing, and minimisation of environmental impact throughout the equipment lifecycle. **Outcome measure** The service can demonstrate sustainable procurement practices, effective waste reduction and recycling. **Suggestions** • Services should work towards the integration of digital solutions and existing and new equipment, to reduce power consumption and environmental footprint Adoption of a circular economy model for equipment and consumables, including strategies for reuse, refurbishment, and responsible disposal. • Policies and procedures for minimising the use of single-use items (e.g., IV contrast syringes, ultrasound gel packets, PPE), with clear justification for their use and exploration of sustainable alternatives. • Robust recycling programmes for all eligible materials, including plastics, paper, packaging, and electronic waste, with regular audits of recycling rates and staff engagement. • Where possible there should be transparent tracking of where purchases are coming from, including supplier sustainability credentials, ethical sourcing, and carbon footprint of supply chains, see note 3. • Collaboration with procurement teams to include sustainability criteria in tendering and purchasing decisions. • Staff training and awareness initiatives on sustainable procurement and waste management. • Services should work towards influencing waste generation, recycling rates, and procurement sustainability metrics. • IV contrast minimisation – explore potential recycling programmes. • Engage with suppliers to reduce packaging and replace paper manuals with digitised alternatives. • Services should aim to minimise paper usage wherever possible in alignment with national digital transformation programmes. • Services should regularly monitor the inventory to avoid unnecessary expiry and disposal of products. *Notes:* 1. *Definition of circular economy – 'an economic system based on the reuse and regeneration of materials or products, especially as a means of continuing production in a sustainable or environmentally friendly way.' Oxford dictionary* 2. *The service should align its practices with the wider organisation's sustainability and procurement policies.* 3. *This QS acknowledges that this is usually possible only when purchases fall under the radiology service's remit.* 4. *Consideration should be given to the environmental impact of equipment throughout its lifecycle, from manufacture to disposal.* 5. *Engagement with suppliers and manufacturers to encourage sustainable product design and packaging is encouraged.* 6. *Moving to digital/paperless must not increase digital exclusion. Services should consider where they keep alternative accessible formats available and evidence how equity is protected while reducing waste.* 7. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.*

	8. *Services should be aware of suppliers' requirements under the net zero road map NHS-Net-Zero-Supplier-Roadmap-2024.pdf* 9. *Delivering a 'Net Zero' National Health Service NHS England 2022* 10. *Steering Scotland's pathway to net zero. Scottish Government*

XR-311	**Sustainability and service design** **Quality statement** Service design considerations should prioritise local access, co-location of services, and streamlined patient pathways. **Outcome measure** Services should evaluate the service design to consider local access with actions to reduce unnecessary journeys and the need for multiple visits. **Suggestions** • Consider site rationalisation, flexible working, remote reporting, and virtual consultations. • Optimising service delivery through thoughtful service design, integration of technology, and innovative models of care. • Integration of technology and innovation, such as telemedicine, remote image sharing, digital referrals, and virtual multidisciplinary team meetings, to support care closer to home. • Services should demonstrate initiatives to minimise unnecessary travel for both staff and patients. • Services should consider the impact of travel and transport patterns for staff and patients. • Implementation of "one stop" models where feasible, enabling patients to receive consultation, imaging, and results in a single visit. • Collaboration with transport providers and local health systems to facilitate sustainable travel options for patients and staff. • Regular review of travel reduction initiatives and their impact on service delivery, patient outcomes, and environmental sustainability. • Patient and staff engagement in identifying barriers to travel reduction and co-designing solutions. *Notes:* 1. *The service should align travel reduction initiatives with the wider organisation's sustainability and net zero strategies.* 2. *Consideration should be given to the needs of patients with limited mobility or those living in remote areas.* 3. *Technology solutions should be accessible, secure, and compliant with data protection standards.* 4. *The effectiveness of "one stop" and virtual models should be regularly evaluated, with feedback used to drive continuous improvement. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 5. *Reviewers should evaluate how services can address this QS, taking into account the geographic location and distribution of the patient population, especially in remote areas* 6. *Design for Life roadmap, policy paper 2025 Department of Health and Social Security* 7. *Improving access to health and social care services through digital and technological innovation - NHS Scotland operational improvement plan. Scottish Government* 8. *Sustainability Leadership for Greener Health and Care Programme, NHS Leadership Academy* 9. *This QS Links to XR-301*

Ref

XR-4 AI digital technologies and data

XR-401	**Picture archiving and communication system (PACS)** **Quality statement** A Picture Archiving and Communication System (PACS) is in place to store, retrieve and transmit diagnostic imaging and associated patient information efficiently and securely. **Outcome measure** All imaging produced by the service is managed through an integrated PACS solution that supports clinical workflow, reporting, image sharing and meets national reporting requirements. **Suggestions** • The service complies with national PACS standards as defined by RCR guidance, information governance and data protection legislation. • A Data Protection Impact Assessment (DPIA) must be completed and approved by the Trust/Health board Information Governance Board before any data is shared. • A documented governance framework, including roles, access and responsibilities for all staff, with a named PACS lead. • There should be a process for managing misfiled images and identification issues. • The service should have training and competency records in PACS for staff relevant to their role. • PACS supports safe transfer of images and information to users across all service locations, external providers and partner organisations. • Services should ensure cyber security and resilience. • PACS can collect required national reporting data (e.g. radiation dose data). • Systems undergo regular quality checks (e.g. data cleansing, list management, functionality checks). • All imaging equipment used by the service is integrated with PACS. • Specific arrangements exist for mobile imaging equipment. • Contingency plans are in place for PACS downtime. • PACS out-of-hours cover includes staff with appropriate knowledge of radiology systems. • Risk assessment exists for any imaging modality not uploading to PACS. • Use of PACS for teaching, audit and research is defined and governed, including patient consent where required. • A process exists for developing, implementing and auditing clinical imaging protocols. *Notes* 1. *Meeting this standard is not dependent on a specific PACS vendor. Focus is on the integrated nature of the implementation.* 2. *Reviewers should consider relationships between the service and IT departments at organisational and departmental levels.* 3. *PACS procurement tips and tricks, RCR 2025* 4. *Picture archiving and communication systems (PACS) and guidelines on diagnostic display devices Third edition RCR 2019* 5. *Data Protection Act 2018* 6. *Cyber and data security - NHS England Digital* 7. *DHCNI - Digital Health & Care, Northern Ireland*

	8. *Digital and Security, National Services Scotland* 9. *Making digital a force for good in health and care. Digital Health and Care Wales.* 10. *The Caldicott Principles - GOV.UK* 11. *Digital and data strategy for health and social care in Wales. Welsh Government.*

XR-402	**Radiology information systems** **Quality statement** Radiology information systems are in routine use to support safe and effective management of patient information, workflow, reporting and communication. **Outcome measure** An integrated radiology information infrastructure manages all patient and workflow information required by the service. **Suggestions** • There should be a framework for access to radiology systems. All users should complete an access request form, after which the appropriate level of access, dependent on role, can be granted. This should be maintained by an audit record. • There should be a process for managing errors and identification issues. • A radiology information system supports scheduling, workflow management, reporting and data capture. • The service should consider interoperability of the Radiology wide system with institution wide systems. • IT infrastructure supports transfer, receipt and tracking of radiology-level information across all clinical areas. • Systems support national reporting requirements (e.g. dose data, activity data). • Radiology IT systems undergo regular quality checks and maintenance. • Services should have processes in place to manage cyber security and data resilience. • All department equipment and local IT solutions integrate into the radiology IT ecosystem. • Specific arrangements exist for mobile or remote-location IT access. • Contingency planning is in place for RIS and other IT related failure. • Defined IT and technical support arrangements are available for the service's operational hours. • Out-of-hours support includes staff with appropriate technical and radiology-system knowledge. • Risk assessments exist for any radiology system or modality not interfacing with RIS. • Processes for developing, implementing and auditing clinical imaging protocols are supported by radiology IT systems. • In Wales, local and national digital governance arrangements should reflect relevant health board/NHS trust governance and national digital structures. *Notes* 1. *Reviewers should consider the service's local and organisational-level IT relationships and governance.* 2. *Responsibilities for Radiology IT systems management are referenced in XR-201.* 3. *Guidance on Safe Management of Medical Devices and Equipment in Scotland's Health and Social Care Services. National Services Scotland, 2024.* 4. *Digital transformation in the NHS - National Audit Office (NAO) report* 5. *Evidence standards framework for digital health technologies - NICE* 6. *Clinical Safety Standards, NHS* 7. *Digital and data strategy for health and social care in Wales. Welsh Government* 8. *Scotland's Digital Health and Care Strategy*, Scottish Government

	9. *Audit Scotland* 10. *MHRA – Digital Mental Health Technology*
XR-403	**AI governance and safety systems** **Quality statement** The imaging service has robust governance and safety systems to oversee the safe, effective, ethical, and transparent use of AI throughout its lifecycle. **Outcome measure** The service demonstrates that use of AI tools is governed through defined structures and processes ensuring patient safety, clinical effectiveness, value-added assessment, accountability, and equitability. **Suggestions** • A documented AI governance framework is integrated into the service's governance structure with defined roles for oversight and risk management • A register of all AI systems in use is maintained, including their purpose data validation, performance metrics, and regulatory status. • There are defined processes for risk assessment, incident reporting, and mitigation of safety concerns related to AI tools. • Services should consider monitoring of AI bias and differential performance across patient groups where data is available. • Patients are informed where appropriate, when AI contributes to their care. • Data protection and information governance processes comply with UK GDPR national information governance requirements and relevant national digital standards • Services should complete the AI imaging registry hosted by the RCR, linked in note 7. • Lay representatives or patient groups for involvement should be considered in AI oversight. • Services should consider how information is given to patients when AI tools are in use. *Notes:* 1. *Under IR(ME)R only appropriately trained and entitled operators can be responsible for the clinical evaluation of an ionising radiation exposure. AI and data-driven technologies can be used to support rather than replace human decision making.* 2. *A guide to using artificial intelligence in the public sector, Office for Artificial Intelligence, 2020* 3. *AI Roadmap,2021 A Report by the AI council* 4. *Office for Artificial intelligence, Gov.UK* 5. *NHS AI and Digital Regulations Service for Health and Social Care webpage* 6. *What NICE Does - Digital Health - Artificial Intelligence at Nice* 7. *The Topol Review , NHS* 8. *Artificial Intelligence Imaging Registry, The Royal College of Radiologists* 9. *Artificial intelligence (AI), The Royal College of Radiologists* 10. *Integrating artificial intelligence with the radiology reporting workflows (RIS and PACS), The Royal College of Radiologists, 2021* 11. *The Society and College of Radiographers policy statement: Artificial Intelligence 2020*

XR-404	**AI training and education** **Quality statement** The imaging service ensures all staff involved in AI use, interpretation, or governance receive appropriate, ongoing education to support safe, effective, and ethical use of AI. **Outcome measure** The service demonstrates that staff have the knowledge and confidence to use AI systems safely, supported by structured education, continuous professional development (CPD), and competency assessment where appropriate. **Suggestions** • The service has a documented AI education strategy. • The service provides access to regular professional development opportunities relating to AI literacy. • Training is tailored to specific staff roles and scope and includes AI principles, ethical and legal considerations, bias awareness, and safe use within clinical workflows. • Staff must be aware of their responsibility under IR(ME)R in relation to AI. • Training is proportionate to staff responsibilities and refreshed as AI tools or policies evolve. • AI competencies are incorporated into induction, mandatory training, or CPD. • Ongoing evaluation of training effectiveness is undertaken through audit, user feedback, or incident review. *Notes:* 1. *Reviewers should enquire the process for dissemination of knowledge as to which patients and pathologies AI applies to.* 2. *The Ionising Radiation (Medical Exposure) Regulations (IR(MER) provide a framework for the safe use of ionising radiation in medical and non-medical imaging, including use of medical devices. Only appropriately qualified and trained human operators can be responsible for the clinical evaluation of any ionising radiation exposure. Legally, AI and data-driven technologies cannot replace human decision making and should only support it .* 3. *Regulations and Guidance for Adopters, NHS UK* 4. *Post-deployment monitoring and safety reporting of AI medical imaging devices in clinical practice. RCR 2026* 5. *Artificial intelligence: Guidance for clinical imaging and therapeutic radiography workforce professionals, SoR 2021* 6. *Introduction to Artificial Intelligence webinar, SoR*

XR-405	**AI development, procurement and implementation** **Quality statement** The imaging service follows structured, transparent, and evidence-based processes for developing, procuring, and implementing AI systems. **Outcome measure** The service demonstrates that all AI systems introduced into the service have undergone evaluation, local validation, and testing. **Suggestions** • In-house AI development is governed through research and ethics approval processes. • Procurement decisions involve multidisciplinary input as appropriate. • Procurement and implementation follow national guidance frameworks. • Decisions are based on documented business cases including clinical need, risk assessment, ethical impact, and sustainability considerations. • AI systems comply with regulatory requirements (e.g. UKCA/CE marking, MHRA approval) and national guidance. • Where appropriate, AI systems undergo local validation, governance approval, risk assessment, and testing with representative data prior to clinical use. • AI tools integrate safely within digital infrastructure (e.g. PACS, RIS, EPR) with interoperability and business continuity measures in place. • Data used for AI development or validation meets NHS data governance standards for quality, diversity, and bias mitigation. *Notes:* 1. *Guidelines for AI procurement , Gov.UK 2020* 2. *Artificial intelligence and digital regulations service NICE 2026* 3. *AI deployment fundamentals for medical imaging, The Royal College of Radiologists 2024*

XR-406	**AI post-implementation surveillance** **Quality statement** The imaging service maintains ongoing monitoring and evaluation of AI systems after deployment to ensure continued safety, accuracy, and clinical effectiveness. **Outcome measure** The service demonstrates that AI systems in use are subject to surveillance, including performance monitoring, user feedback, and periodic review. **Suggestions** • An AI surveillance policy outlines responsibilities, monitoring methods, and review frequency. • Surveillance is proportionate to clinical risk. • Performance metrics are regularly audited against baseline validation data and clinical outcomes. • There are clear mechanisms for identifying and addressing model and user drift, data quality issues, and workflow impacts. • AI-related incidents and user concerns are captured within existing governance and incident reporting structures. • Updates or software changes undergo risk assessment and revalidation before re-deployment. • Findings from surveillance inform AI system improvement, model retraining, use-case review or governance actions. • Collaboration with suppliers and participation in national monitoring programs support continual improvement. • AI device incidents should be reported to MHRA via the Yellow Card website. *Notes:* 1. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 2. *Post-deployment monitoring and safety reporting of AI medical imaging devices in clinical practice, The Royal College of Radiologists 2026* 3. *Practical guidance to Post-market surveillance of Artificial Intelligence tools*

XR-407	**Emerging technologies and innovation** **Quality statement** The imaging service proactively evaluates, adopts, and integrates emerging and adaptive technologies to enhance clinical practice, patient care, safety and operational efficiency. **Outcome measure** The service demonstrates a systematic approach to horizon scanning, piloting, and implementing new technologies. **Suggestions** • This QS is wider than implementation of AI and includes all new technologies and equipment. • A documented policy or strategy for the identification, evaluation, and adoption of emerging technologies (e.g., AI, machine learning, advanced imaging modalities, digital health tools, virtual support tools). • Regular horizon scanning activities, including engagement with professional bodies, industry, and research networks. • Services should demonstrate safe adoption, ongoing evaluation, and where possible measurable impact of new technologies. • Structured processes for technology assessment, including clinical, operational, financial, sustainability, and safety considerations. • Pilot programmes and controlled implementation of new technologies, with defined evaluation criteria. • Staff training and development to support safe and effective use of new technologies. • Mechanisms for patient and carer feedback on technology-enabled care. • Ongoing monitoring of technology performance, safety incidents, and outcomes. • Integration of adaptive technologies into service improvement and development plans. • Compliance with national and local regulatory requirements, data protection, and information governance. • Regular review and update of technology strategy in response to advances and feedback. *Notes:* 1. *The technology strategy should align with the wider organisation's digital transformation and innovation plans.* 2. *Adoption of new technologies should be inclusive, considering accessibility and equity for all patient groups.* 3. *The service should collaborate with IT, clinical engineering, medical physicists and external partners to ensure robust implementation.* 4. *The service should demonstrate how lessons learned from pilots and early adoption inform wider roll-out and future technology decisions.* 5. *Reviewers should look for evidence of sustainable improvements in service quality, patient experience, and staff engagement linked to technology adoption.* 6. *Link to XR-602.* 7. *NICE Healthtech Guidance Smarter NHS Tech Choices*

XR-408	**Data analytics** **Quality statement** The service collects, analyses, and monitors its data to improve the quality of the service delivery. **Outcome measure** The service can demonstrate continuous and sustainable improvements informed by collected data and in line with Key Performance Indicators (KPIs). **Suggestions** • Services should determine their own KPIs, they should reflect what is important to the service and organisation. These should align with patient population and commissioner needs. The KPIs must include those required by national policy and guidance. • Services should be able to demonstrate that data collection processes are in place, along with a system for review, monitoring the quality and use of data. • Services should have defined key data items for collection and analysis. • Services can demonstrate that sustainable service improvements align with the outcomes data collected and KPI's. • Service should be able to demonstrate records of a review of KPIs and a log of agreed actions. • The service should participate in regular benchmarking through information sharing and analysis. • A clear policy should be in place for data sharing for research and innovation purposes. • There should be processes in place to action and monitor issues identified by the data. • Key data items should also be collected for the wider organisations and national delivery standards. *Notes:* 1. *All data governance should align with XR-401 and XR-402.* 2. *Reviewers will want to enquire about the process for determining KPIs and reviewing KPIs.* 3. *Reviewers will want to enquire about the process for selecting data items.* 4. *Reviewers will want to enquire about the frequency of monitoring.* 5. *Diagnostic Imaging dataset DID NHSE*

XR-409	**Imaging timescales and turnaround times** **Quality statement** Imaging timescales and turnaround times are defined and agreed to optimise patient outcomes. **Outcome measure** The service can demonstrate that modality-specific KPIs are being met for imaging timescales and turnaround times. **Suggestions** • A dashboard of performance against agreed timescales should be regularly considered by the service for the following: • Receipt of referral • Referral to examination • Acquisition time • Examination to report • Initial reports issued • Timescales for imaging in clinical pathways should be included • Other timescales agreed locally • The service should be able to demonstrate a policy and process setting out how it will meet these requirements. • The service should agree classification and referral category. • The service should have procedures to address situations where workforce capacity constraints may impact the achievement of key performance indicators (KPIs). • The service should show how it is monitoring and managing waiting times for patients. • Processes in place to manage and action where timescales and turnaround times are not being met. *Notes:* 1. *KPIs should be defined by national guidelines, including nationally applicable requirements in the relevant UK nation, or by locally agreed timescales where these exceed national guidelines, or there are no national guidelines in place. Consideration should be to national and professional guidance.* 2. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 3. *Where reviewers consider 'other timescales agreed locally', these should be credible and consistent with recognised good practice.* 4. *NHS England: Changes to cancer waiting times standard from 1 October 2023* 5. *NHS England » Diagnostic imaging reporting turnaround times; 2023* 6. *Diagnostic waiting times - Waits for key diagnostic tests 24 February 2026 - NHS waiting times - diagnostics - Publications - Public Health Scotland* 7. *Diagnostics Waiting Times and Activity, NHS UK* 8. *The National Cancer Plan for England: delivering world class cancer care, 2026 DoH&SC* 9. *Cancer action plan 2023 to 2026 - gov.scot*

Ref

XR-5 Radiation safety

XR-501	**Ionising radiation safety (medical exposure)** **Quality statement** The service is compliant with national regulations regarding the use of ionising radiation for medical exposures. **Outcome measure** The service performs regular audits demonstrating compliance with the Ionising Radiation (Medical Exposure) Regulations IR(ME)R 2017 (2018(NI) and subsequent amendments. **Suggestions** • Procedures must be in place covering the use of ionising radiation. • The service should have radiation protection and safety groups at a local and provider level led by a radiation protection professional or an individual with radiation safety expertise. • Services have processes in place for preliminary investigation of all radiation incidents as required by regulation. • The audits should consider as a minimum: a. Appointment of a Medical Physics Expert (MPE) b. Employer's IR(ME)R procedures (Schedule 2) c. Entitlement of duty holders d. Staff training, assessment of competence and continuing professional development with the involvement of the Medical Physics Expert where appropriate e. Employer's duties relating to equipment including software f. Use of diagnostic exposure optimisation and reference levels g. Management of accidental/unintended exposures h. Administration of Radioactive Substances Advisory Committee (ARSAC) licensing (employer and practitioner) where appropriate – see Nuclear Medicine quality standards i. Co-operation arrangements for practical aspects, referrals and justification of exposures carried out across two or more employers • Audits of diagnostic reference level (DRL) quantities, with a clear process for the establishment and use of local DRLs with the advice of an MPE, should be regularly undertaken. *Notes:* 1. *The audits demonstrating compliance must include input from the Medical Physics Expert (MPE) for diagnostic radiology where required.* 2. *This QS will demonstrate how the service provides assurance to the employer, the provider organisation and the patient that it remains compliant with national radiation safety regulations.* 3. *The radiation protection and safety groups should define its terms of reference, membership details and lines of accountability. Any area(s) of non-compliance should be raised using an agreed escalation process. Robust action plans including responsibilities and timescales should be drawn up to fulfil regulatory requirements.* 4. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.

	5. *Reviewers will want to know that staff are aware of the procedures, know how to access them and there is evidence that practice is aligned to procedures. These should include a radiation safety policy (may be at provider level), employer's procedures.* 6. *Reviewers should be assured that roles and responsibilities are identified.* 7. *Reviewers should identify the appropriate processes for and ongoing management of entitlement under IR(ME)R.* 8. *Reviewers will want to check that staff are aware of the processes for reporting significant accidental or unintended exposures (SAUE).* 9. *IR(ME)R Notify us about an exposure*, Care Quality Commission 10. *https://www.cqc.org.uk/guidance-providers/ionising-radiation/ionising-radiation-medical-exposure-regulations-irmer/notify-us-about-exposure* 11. *The Diagnostic Radiographer as the entitled IR(ME)R Practitioner SoR* 12. *Student radiographers & trainee assistant practitioners as "Operators" under IR(ME)R SoR.* 13. *IR(ME)R: Implications for clinical practice in diagnostic imaging, interventional radiology and diagnostic nuclear medicine. The Royal College of Radiologists (in development).*

XR-502	**Ionising radiation safety (worker and public protection)** **Quality statement** The service is compliant with national regulations relating to public and occupational safety when using ionising radiation in medical imaging. **Outcome measure** The service performs regular audits demonstrating compliance with The Ionising Radiation Regulations 2017 (IRR). **Suggestions** • Services should consider the following areas, as a minimum, for audit: a. HSE registration and consent b. Appointment of a Radiation Protection Advisor (RPA) and one or more Radiation Protection Supervisors (RPS) c. Radiation protection management including contingency planning d. Radiation protection training e. Risk assessments f. Area designation and restriction of access g. Local rules h. Staff and learners dose records and requirements for classified workers • The role of the RPA should be defined. • The role of the RPS(s) and requirements for each area should be defined. • The radiation protection committee should have multidisciplinary membership relevant to the service(s) provided. • The provider's radiation safety committee (or equivalent) should consider reports of compliance and make recommendations on their findings. • Where the radiation safety committee (or equivalent) deems the service non-compliant with national regulations, an action plan with timescales and responsibilities should be agreed. • The service should ensure that it co-operates with other employers as appropriate to ensure it meets the requirements of regulation 16 regarding exchange of information related to possible exposure of employees. *Notes:* 1. *Services would not be expected to audit HSE registration and consent or the appointment of the RPA and RPS but should verify that those requirements had been met.* 2. *The audits demonstrating compliance should as a minimum include input from the RPA and the relevant radiation protection supervisors.* 3. *This QS will demonstrate how the service assures the employer and the provider organisation that it remains compliant with national radiation safety regulations.* 4. *The service should have radiation protection and safety groups at a local and provider level with defined terms of reference and membership details. Any area(s) of non-compliance should be raised at an appropriate level with escalation processes in place. Robust action plans including responsibilities and timescales should be drawn up to fulfil regulatory requirements.* 5. *Reviewers will want to check that staff are aware of the processes for reporting significant accidental or unintended exposures and that services have processes in place for preliminary investigation as required by regulation.* 6. *Position statement: Radiation dose monitoring of trainees SoR*

XR-503	**Radiation and the pregnant patient** **Quality statement** A protocol, covering ionising and non-ionising imaging, is in place to identify and reduce the risk to patients attending the service who are or who may be pregnant. **Outcome measure** Individuals who are pregnant, or may be pregnant, are identified early, supported with information and shared decision-making, and imaged safely. **Suggestions** • A protocol should be agreed, used and fully embedded by the service. For ionising radiation IR(ME)R requires an employer's procedure to be in place. • The protocol should include management of medicines for individuals who are pregnant, see XR-705. • A procedure should be in place for identifying and making enquiries of individuals of childbearing potential, to establish whether the individual is or may be pregnant. • No incidents of avoidable accidental or unintended harm to a fetus due to ionising or non-ionising radiation occur. • Information should be available within the service advising individuals who are pregnant, or unsure if they are pregnant or have potential to be pregnant to discuss this with the imaging team. This should include clear visual displays (for example information leaflets and posters) and verbal communication. • If an individual who is known to be pregnant requires an imaging examination that presents a potential risk to the fetus, the risks and benefits of the examination should be communicated to the individual. In complex cases, the consent process should involve a multi- disciplinary team discussion with the patient to ensure that the patient is fully informed and aware of the benefits and risks to themselves and the fetus. It must be clear that they have understood and consented to the procedure before proceeding (link to consent). • Local processes should include how the exposures are justified by the IR(ME)R practitioner in the case of an ionising radiation and MR safety expert for an MRI examination along with the responsibilities of the referring clinician, the operator and the reporting clinicians. • There should be a process in place for patients who, after the imaging examination has taken place, notify the service that they are pregnant. This should include an assessment of dose and risk to the fetus from ionising radiation and supporting them to understand the risk, see note 2. *Notes:* 1. *Service guidelines must reference regulations and the latest professional guidance.* 2. *In this case an investigation should take place to include an audit of the pregnancy checking procedures.* 3. *This QS also applies to modalities using non-ionising radiation - link to MR-901* 4. *Magnetic resonance imaging equipment in clinical use: safety guidelines - GOV.UK* 5. *Protection of Pregnant Patients during Diagnostic Medical Exposures to Ionising Radiation , The Health Protection Agency, RCR and the College of Radiographers* 6. *Royal College of Radiologists - Pregnancy Questioning* 7. *Guidance on gadolinium-based contrast agent administration to adult patients | The Royal College of Radiologists* 8. *The Society of Radiographers - Inclusive pregnancy status guidelines for ionising radiation* 9. *The Society of Radiographers - PAUSED and Checked for Pregnancy*

Ref

XR-6 Equipment

XR-601	**Clinical scientific and technical support** **Quality statement** Scientific advice and technical support are an integral part of the imaging service. **Outcome measure** Scientific expertise, advice and support is available and defined through a Service Level Agreement (SLA) or other agreement. **Suggestions** • Timely access to clinical scientific and clinical engineering support should be defined, agreed and used effectively. • If any of the posts are internal these roles should be included in the evidence given for XR-2 section, see note 4. • Valid contracts, SLAs or other agreements for the level of services provided should be in place, including evidence that the required key personnel are in post. • At least the following services should be available (where applicable): a. Radiation Protection Advisor (RPA), mandatory for ionising radiation b. A Medical Physics Expert (MPE) mandatory for work using ionising radiation and medical exposure, ionising radiation regulations or a clinical scientist/clinical engineer c. An MR Safety Expert (MRSE) d. A Radioactive Waste Adviser (RWA) e. Ultrasound physics support • These post holders should also advise on service wide training for their area of expertise. • There should be assurance that all scientific and technical staff have regular assessments, and competence appropriate to their roles and should be included in the SLA. • A multidisciplinary approach should be taken to obtain new or replacement equipment and should involve the clinical scientist/clinical engineer, the MPE (for ionising radiation), or the MRSE (for MR, US and where appropriate). *Notes:* 1. *This QS covers medical physics, clinical engineering, and other scientific staff, appropriate to the equipment available, employed by the provider or related organisations. The focus of the QS is on clinical scientific support, however derived or provided.* 2. *This QS may be met through staff managed by the imaging service, other staff employed by the provider, staff from other imaging services within the network, or staff from non-NHS providers, or a mixture of these arrangements.* 3. *Where this is all externally sourced through contracts, reviewers should enquire as to any on-site scientific support or maintenance for ancillary equipment.* 4. *SLAs are not needed if the support service is internal to the Trust/Health Board.* 5. *Imaging equipment from procurement to installation and commissioning. The role of the medical physicist Clinical Imaging Board, 2023*

XR-602	**Equipment management** **Quality statement** Arrangements for equipment management are in place to ensure high quality diagnostic outcomes. **Outcome measure** The service can demonstrate that its equipment is managed, maintained and replaced in line with service need. **Suggestions** • Ability to deliver the technical requirements for the range of examinations performed. • The service must maintain an asset register for all its equipment that also meets all relevant regulations such as IR(ME)R regulations (Reg 15(2)). • The service should have a risk-assessed equipment replacement programme agreed with the provider. • Clear contracts or agreements with machine manufacturers, or third-party arrangements, should be in place. • Equipment management records should be kept covering: • Procurement and management of equipment and consumables • Installation acceptance and testing • Appropriate handover procedures following installation should be in place • Calibration, operation and performance of equipment • Infection prevention and control processes • Safe operating weight limits of all imaging tables, couches, trolleys and other equipment in use should be identified. Actions to take when these limits are exceeded should be set out in the training/policy. • A quality assurance process for each piece of equipment should be documented. • There should be arrangements for equipment maintenance (service contracts and maintenance schedules) covering planned maintenance and breakdown or unscheduled maintenance. Response times should be agreed including for out-of-hours' maintenance. • Contingency plans should be in place in the event of equipment breakdown or power failure. • There should be monitoring and management of equipment failures and faults. • Equipment safety warnings, alerts and recalls should be circulated and acted upon within specified timescales. • A programme of equipment replacement should be in place and there should be risk management of equipment used beyond its replacement date and escalation/mitigation if needed. • Procurement processes should be in place to ensure equipment is evaluated and selected by staff who are competent to do so, see note 2. • The service should have processes for regular analysis of key performance indicators and incident reports relating to equipment provision or equipment failure. *Notes:* 1. *Services should ensure that the right complement of staff with appropriate expertise are involved in procurement of new equipment.* 2. *Where the equipment is held outside of the dept, ie mini c-arm, sentinel node probes, there is clear governance about which team is responsible for the above.*

	3. *Asset registers should include more than just the high-value capital assets; they should include IT.* 4. *These arrangements should link with provider-wide arrangements for the governance of medical equipment.* 5. *XR-601 relates to scientific and technical support. Reviewers will want to ensure that XR-602 together with XR-601 covers the range of equipment and support services provided by the service.* 6. *Imaging equipment from procurement to installation and commissioning. The role of the medical physicist Clinical Imaging Board, 2023*

XR-603	**Equipment quality control and quality assurance** **Quality statement** The service follows national guidance on quality control (QC) and quality assurance (QA) for equipment. **Outcome measure** The service can show compliance with the latest national and professional regulations, standards and guidance on QC and QA, and adherence to schedules (frequency of tests), including taking action if equipment and calibration is outside tolerance levels. **Suggestions** • Advice of a clinical scientist/clinical engineer, MPE (for ionising radiation), or MRSE (for MR) should be sought to ensure the guidance is correctly interpreted. • The service should have a procedure in place detailing the QC and QA tests that are carried out on its equipment, the frequency with which those tests are completed, by whom, how the results of those tests are communicated to those using the equipment, and what steps should be taken if equipment is found to outside tolerance levels. • Appropriate training should be provided for staff performing regular QC and QA according to their role. **Quality Assurance and Software:** • Imaging services should ensure that software for the measurement of clinical findings or between points of reference has reproducible results between clinical systems in use by the service. • The imaging service should use a consistent approach to software to ensure reproducibility. • Systems in use in the imaging service should have measurement parameters calibrated and checked. • Systems used in the measurement of clinical images allow consistent interpretation. • Calibration requirements and measurement of uncertainty should be documented. • When the service works across a clinical network, consistency checks should be applied. • The service should record which systems are in use to ensure that patients returning for checks on progression of their clinical findings can have consistent measurements. • There should be records of requirements for QA testing of lead PPE. **Quality Control (QC):** • There should be procedures and records to show that clinical staff perform appropriate and regular quality control checks on imaging equipment in line with the service's policy, both before use and when equipment conditions indicate this is necessary. • Quality checks should be evidenced. • Details should be kept of corrective action taken where testing shows parameters outside tolerance or expected levels. ***Notes*** 1. *In the UK, the Quality Assurance of radiological equipment is governed by the Ionising Radiation (Medical Exposure) Regulations 2017 IR(ME)R, 2018 in Northern Ireland.* 2. *Patients returning for repeat or future measurement of a clinical finding or disease progression are most impacted by accurate quantification software. Reviewers should enquire how the service manages this cohort of returning patients.*

	3. *Note Quantification software enables precise quantification of features such as pixel intensity, area, diameter and perimeter – significant for follow up of patients with conditions such as Glioma* 4. E*quipment quality assurance (QA): A quick guide, BIR*. 5. *Multi-Medix QA Manual* US guidance 6. *The Radiographic Assistant Practitioner's role in Quality Control of Radiological Equipment. Society of Radiographers, 2024.*

XR-604	**Image quality and optimisation** **Quality statement** There should be a multidisciplinary approach to the process of image quality and image optimisation is considered in all clinical imaging protocols. **Outcome measure** The service can demonstrate improvements to image quality through image quality and dose audits. **Suggestions** • Clinical imaging protocols should reflect the balance between patient exposure and the requirement to achieve optimum image quality. • Image optimisation should include a process for evaluating image quality through dynamic feedback from reporting. • Image quality begins at the point of referral – right test, right protocol, right equipment. • Training, competence and education of staff for image optimisation and quality. • A mechanism for ensuring feedback on image quality from reporters and referrers to the image acquisition practitioner. • Anatomical side markers must be in use as directed under IR(ME)R. • A process is in place for minimising artifacts. • A process for reporting equipment failure that impacts image quality. • A clear process for the development, implementation and audit of clinical imaging protocols should be in place. • There should be a system in place to ensure that, when clinical imaging protocols are updated, the corresponding protocols on RIS are updated so that these align. • There should be a multidisciplinary protocol development and management process. • Audits of diagnostic reference levels (DRL), with a clear process for the establishment and use of local DRLs with the advice of an MPE, should be regularly undertaken. (Link to XR-501). *Notes:* 1. *Reviewers will want to ensure that the service is monitoring reject analysis, diagnostic acceptability and interpretation.* 2. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.

Ref

XR-7 Guidelines, protocols and clinical safety

XR-701	**Referral management guidelines** **Quality statement** A referral management protocol, including a process for rejected referrals, is in place. **Outcome measure** The referral management protocol is adopted by all staff and entitled referring clinicians. **Suggestions** • A process is in place for ensuring the appropriateness of referrals and this information is available all relevant staff. • There is a list of approved staff/job roles/titles, including clerical staff, who can approve or reject referrals. • The process for rejected referrals should include how it is communicated to the referrer with contacts given for advice. • The service should ensure referral reject processes doesn't create inequity. • Guidelines on the information to be sent with each referral are agreed, circulated and accessible to all referring GPs, referring clinicians and non-medical referrers. • The referral management protocol should include: a. The referral process b. Information to be given to patients c. Consent d. Pre-existing conditions and co-morbidities e. Minimum dataset and clinical information required f. Advice and guidance for referrers g. Imaging referral guidance requirements under IR(ME)R 17 h. Management of DNAs i. Classification and process of referrals including low value imaging • Information sent to referring clinicians should be available. • Services should standardise clinical imaging protocols, to maximise efficiency and reduce variation as much as possible. • There should be a process for updating guidelines, see XR-701. • A process for distribution should be agreed. • Clinical tools such as iRefer should be considered, see note 4. • The status of a referrer should be documented and any limitation to scope for referrer defined. • The authorisation process and scope of practice of non-medical referrers should be documented. • Audit shows that this protocol is being followed and reviewed. *Notes:* 1. *This QS should address demand optimisation in imaging.* 2. *For ionising radiation, the availability of this guidance is a requirement under IR(ME)R (6(5)(a)).* 3. *Reviewers will want to enquire how services ensure equity in the referrer rejection process. Examples include reasons, advice and guidance, support for referrers, and monitoring whether rejection rates differ across services and/or populations.* 4. *Reviewers will want to ensure that the guidance also covers non-medical referrers.* 5. *Reviewers will want to enquire how the referral management processes are shared both internally and externally.*

	6. *Referrers need to be aware of clinical support tools such as the RCR radiological investigation guidelines tool, iRefer* 7. *Enabling equitable access to clinical imaging referrals for registered healthcare professionals working in advancing practice roles. NHSE 2025* 8. *Diagnostics recovery and transformation strategy for Wales 2023 to 2025. GOV.WALES* 9. *Good practice guidance for enabling equitable access to clinical imaging referrals for registered healthcare professionals working in advancing practice roles* 10. *Clinical Imaging Requests from Non-Medically Qualified Professionals (3rd Edition). Society of Radiographers, 2024* 11. *Radiology GIRFT Programme National Specialty Report 2020*

XR-702	**Pathway and condition-specific protocols** **Statement** Pathway and condition-specific protocols are in use informed by national, professional regulations, standards, guidance and evidenced-based practice **Outcome measure** The service can show that pathway and condition-specific protocols are being used across all modalities, and that the imaging section of the pathway is regularly reviewed and updated as needed. **Suggestions** • The protocols may cover but are not limited to (relevant to the service being provided): a) Trauma (adults and children) b) Stroke c) Cancer d) Venous thromboembolic disease e) Acute abdomen pathway f) Suspected acute aortic syndromes g) Acute chest pain of possible cardiac origin. h) Cauda Equina • Services should define what is and isn't available 7/7 and 24/7 and what arrangements are in place if a request falls outside of the availability • Guidelines should include the use of medicines and adjuncts. • KPIs for this QS should be locally agreed. • Audits of compliance with this QS should be able to demonstrate a link to the relevant MDT audit programme. • Where services are delivered in a community setting, such as CDCs, they should optimise pathways to enhance patient experience and reduce demand. • The service should regularly audit ongoing compliance with these protocols and triangulate results against reported incidents and non-compliance. • There should an action plan in place to address any gaps in compliance. *Notes:* 1. *The protocols should include all pathway- and condition-specific guidelines relevant to the service provided.* 2. *Compliance with this standard may be part of a wider MDT audit rather than a service-specific audit. When this occurs, reviewers will want to ensure the service has considered the imaging elements of the audit results.* 3. This QS does not specify what constitutes 'regularly'; service should decide the review intervals. 4. *All examinations should have a specific protocol while only some will be subject to pathways. This QS is only related to condition-specific protocols outlined in national guidance.* 5. *Reviewers will want to enquire as to how updates are managed and communicated* 6. *Reviewers will want to ensure that changes to pathways as a result of compliance with this QS are sustainable. In this context, 'sustainable' means that, among other elements, there has been communication and agreement to change with the key stakeholders, consideration of the impact of change and a process for review once implemented.* 7. *Reviewers will want to ensure that MDT attendance and feedback is used for improvements in the service.* 8. *NHS England, Community diagnostic centres*, 2025 9. National Treatment Centres, NHS inform webpage

XR-703	**Consent** **Quality statement** All patients are supported in their decisions regarding consent for their imaging procedures. **Outcome measure** The imaging service has a consent procedure in place which supports patients to make informed decisions. **Suggestions** • The consent procedure used by the service should: a. Be consistent with the wider organisation's consent procedure (if applicable) b. Have appropriate additional detail to ensure compliance with professional body and regulatory guidance, see note 3. c. Cover both written and verbal consent d. Recognise that patients may choose to withhold consent • The consent procedure should cover issues such as: a. Communication of risk and benefit, including limitations and alternatives b. Advocacy c. Shared decision-making d. Capacity, including patients with a deprivation of liberty order in place e. Practicalities of the consent process f. Consent for patients who are unconscious or uncommunicative for emergency procedures g. Invasive procedures h. Specific arrangements for children and young people, including Gillick Competence i. Use of chaperones j. Withdrawing consent. • Services should have a process for two-part consent where appropriate such as for interventional procedures. *Notes:* 1. *Consent may be transitory. It may apply to a single episode of care or may be withdrawn by the patient* 2. *The term 'capacity' is used in Scotland and 'competence' in England and Wales for individuals that cannot consent* 3. *The Mental Capacity Act is relevant only in England, Wales and Northern Ireland. In Scotland, 'Adults with Incapacity (Scotland) Act 2000' provides the legal framework.* 4. *Reviewers may want to enquire about the understanding within the service of 'capacity' relating to consent and decision-making, as defined within the Mental Capacity Act.* 5. *Reviewers should see that those obtaining consent have an appropriate understanding of principles.* 6. *Reviewers should enquire about the translation facilities available and how easily they can be accessed.* 7. *Obtaining Consent: A Clinical Guideline for the Diagnostic Imaging and Radiotherapy Workforce' (2018) SoR* 8. *Communicating Radiation Benefit and Risk Information to Individuals Under the Ionising Radiation (Medical Exposure) Regulations (IR(ME)R SoR CoR*, 2025 9. *https://www.cqc.org.uk/guidance-providers/gps/gp-mythbuster-8-gillick-competency-fraser-guidelines* 2023

	10. Welcome to Healthcare Inspectorate Wales | Healthcare Inspectorate Wales webpage 11. *Guidance on professional standards and ethics for doctors: Decision making and consent (2020) General Medical Council (GMC)* 12. *Consent and confidentiality, HCPC* webpage 13. *Mental Capacity Act - Social care and support guide - NHS* webpage 14. *Guidance on intimate examinations and the use of Chaperones*, SoR, 2023

XR-704	**Imaging of children and young people** **Quality statement** A protocol is in use covering the imaging of children and young people. **Outcome measure** The service can demonstrate compliance with national, professional and local regulations, standards and guidance for the imaging of children and young people **Suggestions** • The protocol should include as a minimum: a. Paediatric authorisation (entitled to justify exposures for paediatric patients) b. Reporting by a radiologist or appropriately trained radiographer/sonographer c. Consent, see XR-703 d. Safeguarding and Forensic Imaging (XR-708) e. Staff training and development f. Paediatric DRLs g. Rationale for and application of immobilisation equipment or methods • The service should have a named lead clinician for imaging children and young people. • Booking processes to ensure on-site paediatric specialty input is available if required • Arrangements that are in place when children move from one service to another. • The protocol should: a. Clarify the arrangements for ensuring availability of appropriately trained staff b. Have a process in place to follow up if paediatric patients do not attend their appointment. • This protocol is required under IR(ME)R 12(8)(a) for exposures of ionising radiation. *Notes:* 1. *If a radiologist or reporting radiographer (or, where appropriate, sonographer) with expertise in reporting images of children is not available 24/7 then the protocol under XR-704 should include referral to a paediatric radiologist at times when local expertise is not available.* 2. *A service level agreement (SLA) should be in place for referral to a paediatric radiologist when local expertise is not available.* 3. *Reviewers may want to ask about specific services for children and young people such as play specialists.* 4. *Overview | Babies, children and young people's experience of healthcare | Guidance | NICE*, 2021 5. *Imaging Children; immobilisation, distraction techniques and use of sedation | SoR*, 2012 **6.** *The radiological investigation for suspected physical abuse in children. RCR (2017).*

XR 705	**Management of medicines in imaging** **Quality statement** A policy on the management of medicines in imaging in line with current national, professional and local regulations, standards and guidance is in use **Outcome measure** The service can demonstrate consideration of and, where relevant, compliance with national, professional and local regulations, standards and guidance within its policy ***Suggestions*** • Guidelines should include: a. Roles, responsibilities and scope related to legal rights, professional and clinical responsibilities b. Documentation outlining the required education and training, including the level of life support training and CPD for each role c. Mechanisms for the legal supply and/or administration of POM medicines to include Patient Group Directions, Patient Specific Directions, and management of off-label or unlicensed medicines, see note 3 d. To include processes for the administration of POMs to unconscious or uncommunicative patients for urgent and emergency examination e. Pregnant patients and patients who are breast feeding f. Use of exemptions in Nuclear Medicine as appropriate g. Mechanisms for the supply and administration of Pharmacy (P)or General Sales List medicines to include the availability of relevant protocols h. Prevention, recognition and management of extravasation i. Consent/assent processes j. Identification and management of patients at risk of adverse reactions k. Policies should define the use of contrast media and the assessment of renal function, including a defined processes for identifying and managing the risks of renal impairment l. The service should consider adapted protocols to minimise the use of Gadolinium contrast agents, with regard to evidence of Gadolinium deposition m. Management of adverse reactions n. Checking of emergency equipment and anaphylaxis medicines o. Record keeping of all medicines-related activity, including adverse reactions p. Reporting of adverse reactions q. Security, storage and stock control r. Management of controlled drugs, including checking s. Process for cleaning contrast agent spillage t. Disposal and mixing of contrast agents u. Aftercare of patients v. Sustainable processes for reduced carbon footprint consider reduction in single use products and protocol review to minimise contrast usage • The policy and any PGDs must be signed off by the provider's medicines management committee or equivalent. • Training in PGDs must be provided and staff individually authorised to use them.

- Non-medical prescribers' regulatory annotations must be checked with the appropriate regulator
- An individual trained and competent in recognising and treating severe contrast reactions, including anaphylaxis and extravasation, should be identified and immediately available for all areas of contrast agent delivery and all times of service provision, see notes 5 and10.
- Considerations for emergency and uncommunicative patients requiring contrast agent examinations should be outlined, including legal authorisation (prescription or waiver for best interest decision in PGD) for radiographers to administer contrast media for emergency patients who cannot be assessed or consent under a PGD, as well as the override of renal function checks.

Notes:

1. *The guidelines should link with the employer's medicines management policy and must have been agreed by the chief pharmacist and/or the provider's Drug and Therapeutics Committee.*
2. *Roles and responsibilities of registered professionals are defined in the Human Medicines Regulations 2012 and vary by profession. The nonregistered workforce including the support workforce can in some circumstances support medicines supply, preparation and administration when there is a PSD or prescription in place. For non-legislative requirements such as second checking of medicines this will be defined by employer level policy.*
3. *Local governance processes should be in place for occasions where medicines are being administered off label for example saline bags are licensed for single use only and sometimes are being used in multidose injectors outside of their marketing authority. In these circumstances, local governance processes should come in to play this should include a full risk assessment and acceptance by the employer within the medicines management policy for its off-label use.*
4. *Considerations for emergency and uncommunicative patients requiring contrast agent examinations should be outlined, including legal authorisation (prescription or waiver for best interest decision in PGD) for radiographers to administer contrast media for emergency patients who cannot be assessed or consent under a PGD, as well as the override of renal function checks.*
5. *A statement released by the RCR and NHSE in 2021 'An individual trained in recognising and treating severe contrast reactions, including anaphylaxis and extravasation, must be immediately available in the department where intravenous contrast is administered. This may be a radiologist, other medical staff from differing disciplines or another healthcare professional (e.g. radiographer, nurse). A written departmental protocol should also be available at each CDH as guidance'*
6. *Reviewers will want to check that staff are aware of and report reactions through the MHRA yellow card and internal reporting and Medicines Management.*
7. *Reviewers should check that staff using a PGD record all aspects as required by SPS and understand their legal responsibility when supplying or administering medicines using this mechanism*
8. *The Human Medicines Regulations 2012, Gov.UK*
9. *Template examples of PGD for contrast media can be found at Patient Group Directions and legal mechanisms – NHS SPS - Specialist Pharmacy Service – The first stop for professional medicines advice webpage*

	10. *Improving Patients' Access to Medicines: A Guide to Implementing Diagnostic Radiographer and Therape, SoR, 2023* 11. *Emergency treatment of anaphylactic reactions, SoR* 12. *Resuscitation Council UK webpage*

XR-706	**Imaging reporting policy** **Quality statement** An imaging reporting policy is in use to enhance quality and ensure consistency **Outcome measure** The service can evidence that the imaging reporting policy is effective and complies with national and professional standards and guidance. **Suggestions** • The policy should consider: a. Roles, responsibilities and scope b. Locally or nationally agreed reporting KPIs c. Agreed reporting formats d. A system to assure quality, accuracy and verification of reports e. Preliminary clinical evaluation, see note 2 f. A system to ensure amendments are issued within specified timescales (when required) g. Previous imaging and further Imaging h. Peer review of reporting i. Access to a second opinion j. Escalation of unexpected, untoward or significant findings k. Use of AI l. Agreed communication of reports • Reporting of images by other non-radiology clinicians (for example emergency department). • Incidents and non-compliance with the guidelines should be shared and discussed within the service. • Processes to include where double reporting is clinically indicated. • The service should be able to demonstrate compliance with the guidance from the RCR (note 6) and SoR (note 7) • A process to feedback on image quality and optimisation (XR-604) *Notes:* 1. *All entitled reporters including reporting radiographers with appropriate knowledge, skills and competence will report independently.* 2. *Reviewers should ensure that any recording of preliminary clinical evaluation is seen separately PCE should be distinct and understood by referrers to be different from a formal image report.* 3. *Reviewers will want to ensure that the audit of compliance is sufficiently comprehensive to provide assurance of compliance.* 4. *Changes to cancer waiting times standards from 1 October 2023 NHS Guidance* 5. *Recommendations on alerts and notification of imaging report, 2022. Academy of Medical Royal Colleges* 6. *Preliminary Clinical Evaluation and Clinical Reporting by Radiographers: Policy and Practice Guidance, SoR, 2013* 7. *Recommendations on alerts and notification of imaging reports, The Royal College of Radiologists, 2022* 8. *Standards for the education and training of reporting practitioners in musculoskeletal plain radiographs, RCR, 2022* 9. *Standards for interpretation and reporting of imaging investigations, third edition, The Royal College of Radiologists, 2025*

XR-707	**Unexpected diagnoses and potential medical emergencies** **Quality statement** A protocol covering the management of unexpected diagnoses and indications of potential medical emergencies is in use. **Outcome measure** The service can demonstrate effective management of unexpected diagnoses and indications of potential medical emergencies. **Suggestions** • The protocol should clarify the process and timescales for: a. Alerting referrers to unexpected findings, see note 1 b. Ensuring acknowledgements of the alert are received by the service c. Management of non-acknowledgement of receipt d. Escalation processes e. Management of alerts when reporting out of hours • Communication with the patient should include location, method and next steps. • Reports should be clear and the critical elements of the report emphasised, along with, where appropriate, the actions the referrer needs to take. • There should be a process in place for the radiographer acquiring the images to alert the reporter of untoward findings noted at the time of imaging. *Notes:* 1. *As the radiographer is often the first person to see an image there should be a process in place to ensure that radiographers are aware of their professional responsibility. Services may want to consider training to support this.* 2. *If the images were acquired by an assistant practitioner services should ensure there is a process for supervision and escalation.* 3. *Recommendations on alerts and notifications of imaging reports 2022. Academy of Medical Royal Colleges* 4. *Unlocking Solutions in Imaging: working together to learn from failings in the NHS Parliamentary and Health Service Ombudsman, 2021*

XR-708	**Forensic and post-mortem imaging** **Quality statement** A policy and protocol for the provision of forensic and post-mortem imaging is in place. **Outcome measure** The service complies with national and professional standards and guidance on the use of forensic and post-mortem imaging **Suggestions** • The procedures for conducting examinations of any patient (live or deceased) that may be used as part of a medico-legal investigation (e.g. assault, suspected physical abuse in paediatrics or adults) are outlined in the forensic protocol. • Protocols should differentiate in the role and processes of forensic and post-mortem imaging between individuals still living or deceased. • Deceased individuals should be treated with the same level of respect and dignity as that afforded to living people. • The protocol should cover at least: a. Roles and responsibilities of all staff involved (including which staff are involved) b. Training, education and competences of all staff involved c. Requests for imaging of the living and deceased including consent and identifying those to be imaged d. Confidentiality, dignity and respect e. Health and safety including radiation protection, infection prevention, manual handling and welfare f. Reporting g. Medicolegal processes including imaging as evidence, continuity of evidence, digital imaging (storage and PACS security) and record keeping h. Details of the service provision including arrangements for out of hours access • Management of consent must be explicitly set out for both living and deceased individuals and relate to the provider's consent policy. Reference should be made to consent for minors. • The process to follow when consent is withheld or withdrawn should be set out in the protocol. • Forensic and post-mortem imaging is part of a multidisciplinary pathway, and the development of the protocol should be in agreement with other stakeholders, as described in the SoR Forensic Guidance • When examinations of deceased individuals are carried out within an imaging department during a time when other patients are in the department, the protocol should detail how this will be managed sensitively. • The organisation's policies and procedures relating to Infection prevention and control, consent, safeguarding, and other elements within the protocol should be consistent with the wider organisation's policy in those areas, be stated in the policy, and be adhered to. *Notes:* 1. *Infection prevention and control, consent, safeguarding and other elements within the protocol should be consistent with the wider organisation's policy in those areas.* 2. *The protocol should specify participation in forensic and PM imaging of the deceased is voluntary unless agreed as part of a contractual job description.* 3. *Forensic and Post-Mortem Radiography Guidance, SoR, 2024* 4. *The radiological investigation of suspected physical abuse in children*, RCR, 2017

Ref

XR-8 Quality and governance

XR-801	**Quality management** **Quality statement** The imaging service has a systematic approach towards managing the quality assurance of the service **Outcome measure** The service can demonstrate it has clear oversight of quality assurance activities, and this is underpinned by an effective quality management system. **Suggestions** • The service should demonstrate that there is a Quality Management System (QMS) in place and undertakes an annual review. • There should be standardisation of terminology throughout the service this should include key patient facing and operational terms. • There should be designated individuals to manage the QMS. • A quality manual should be in place to describe the service's QMS. This should specify what is included and excluded. • The service should define the service's quality objective and KPIs. • The QMS should define how risks, incidents, complaints, nonconformities and clinical records are managed. • A document management system should be in place. • All policies, procedures, guidelines and formally issued instructions should comply with the *wider organisation's* document control policy; this should include but not be limited to: *a*. Start dates, Review dates, version numbers and authorisation of use *b*. An agreed list of who can write, change, amend, approve and issue protocols, procedures and instructions. • Standardisation of protocols should be in place across the service. Protocols should have clear review dates and authorisation for use and be part of a QMS. The service should have clear systems setting out who can make and authorise amendments to protocols. • The service should show how it differentiates between governing the QMS and a collective service responsibility for quality promotion and ownership. • The service should be able to demonstrate a process for feedback of the analysis from the QMS. • The service should be able to demonstrate how the QMS is used to inform management action and improvement efforts. • Where services are provided between or across different providers, the governance system should make clear a common approach to partnership working through dual policies or a single agreed system. Reporting and accountability should be clarified.

	Notes: 1. *Services should ensure that the service leadership and corporate governance team are aware of the QMS for any regulatory inspections* 2. *Reviewers should enquire how the QMS links to existing systems in the organisation such as incident reporting systems and recording of mandatory training should be specified to avoid duplication and corporate blind spots.* 3. *Reviewers will want to ensure that the QMS is owned by the service and not seen as the responsibility of a small number of nominated individuals.* 4. *Reviewers will want to check that protocols are only approved and issued by those who are on the authorised list.* 5. *Reviewers will want to check that terminology standardisation ensures consistent wording across policies, patient communications and training materials and reduces avoidable confusion or variation in interpretation.* 6. *Reviewers will want to enquire how improvements are discussed in team meetings and information regarding updates are disseminated to the service* 7. *Reviewers should enquire about version control, distribution and communication to staff of updated documents.*

XR-802	**Audit** **Quality statement** A comprehensive programme of clinical and service audit is in place **Outcome measure** The service can demonstrate sustainable improvements in care and outcomes as a result of the audit programme. **Suggestions** • The service should define clinical audit; service audit and quality improvement activity including how each is governed and reviewed. • Services should have a process for how audits and service improvements are prioritised. • Services should ensure that action plans are developed following audits, where required. There should be named individuals and timescales for remedial action which are monitored to completion. • The service should appoint clinical lead(s) for audit. • All audits completed by trainees, students or learners are overseen by a substantive member of staff. • Operational audits of local processes should also be included. • The service should hold regular audit programme events that all staff are encouraged to participate in, see note 3. • Services should be encouraged to share learning beyond their own provision. *Notes:* 1. *Reviewers will want to ensure that the range and scope of audits reflect the range of services provided.* 2. *Reviewers will want to enquire if all staff are encouraged and have the opportunity to participate in audit.* 3. *Reviewers will want to enquire about re-audit activity where standards were not met at baseline audit.* 4. *Reviewers will want to enquire about the multidisciplinary nature of audit programmes.* 5. *Reviewers should enquire about audits that have been published or presented beyond the service* 6. *Reviewers will want to enquire whether staff can access the results and learning of audits.* 7. *https://www.hqip.org.uk/ National audits* webpage 8. *Audit & quality improvement RCR webpage*

XR-803	**Research and innovation** **Quality statement** The service is actively engaged in research and innovation initiatives. **Outcome measure** A portfolio of research and innovation projects, including clinical trials if applicable, is held by the service. **Suggestions** • Research and innovation projects may also include clinical audits, clinical effectiveness, quality improvement, audit projects, including service evaluation and case reports. • The service demonstrates a local strategy for research and innovation is in place. • The service should identify areas of innovation. • A culture of research and innovation is embedded in the service. • A list of trials in which the service has participated in the last three years, where applicable. • There should be a named research and innovation lead. • Services should ensure protected time for staff to attend research related CPD activities such as journal clubs, and research-related training opportunities. • Trainee radiologists should be supported with their requirements to carry out research activities. • Where research has been carried out the service should demonstrate the potential impact on patient care and outcomes and/or service delivery. • Services should demonstrate, where appropriate, collaboration with HEIs, imaging academies and industry. • Any activity which involves ionising radiation must comply with IR(ME)R including: a. evidencing that compliance via Essential Documentation for Research Imaging including risk assessments and Auditable Records of Additional Imaging b. Log all research-related imaging in RIS/PACS with a research identifier c. Maintain a radiation risk assessment and dose report for each participant d. Storing all approvals and dose calculations *Notes:* 1. *Research activities extend beyond formal research and publication.* 2. *As a minimum, services should be participating in clinical audits, for example the RCR clinical audit programme. Full information and current audits can be found on the RCR website.* 3. *The service should be able to identify imaging examinations which are part of a research or clinical trial and show that they have ethics and local approval with appropriate MPE/CRE involvement.* 4. *Research portfolios may be held at wider organisational level or by a part of the services not directly managed by imaging. In this case, the service should be able to demonstrate how it is involved in these research studies.* 5. *Reviewers will want to enquire about how the service supports staff, trainees and students to initiate and participate in research.* 6. *Research in nuclear medicine will need ARSAC approval: How and when to submit research applications to ARSAC - GOV.UK (www.gov.uk)* 7. *CoR Research Strategy 2021 – 26, CoR* 8. *New guidance for the set-up of NHS studies involving ionising radiation - Health Research Authority, 2026*

	9. *Developing a Research Strategy for your Local Imaging or Radiotherapy Department, SoR), 2023* 10. *The College of Radiographers Research Priorities for the Radiographic Profession, SoR* 11. *The RCR clinical radiology curriculum 2021 provides guidance on research, audit and quality improvement for trainees.*

XR-804	**Review and learning** **Quality statement** The service has a process in place for review and learning. **Outcome measure** The service can show that learning from feedback and incidents, where necessary, leads to actions and improvements. **Suggestions** • The service uses the learning from: a. Positive feedback, complaints, outcomes, incidents and 'near misses' b. Published scientific research and guidance relating to imaging services c. Other service level governance measures. • The service should comply with NHS national incidents management framework • The service should be able to demonstrate a clear process for review of these measures. • There should be a link to the improvement processes in XR-806. Processes should be in place to identify assess and resolve incidents relating to patient safety • Processes in place for the correct reporting of incidents • Services should have training for staff on incidents management • Services should have a process to disseminate incidents learning to staff. *Notes:* 1. *This QS is not solely focussed on learning from incidents but also includes learning from feedback to* encourage a learning and reporting culture *– both from patients and staff.* 2. *These arrangements should include feedback to operational staff and should link with the wider organisation's governance arrangements.* 3. *This QS is about staff within the service learning together. Uni-disciplinary meetings or management meetings are not sufficient for this QS* 4. *NHS England » Patient Safety Incident Response Framework, webpage* 5. *User guidance and application of the national taxonomy for incident learning in clinical imaging, MRI and nuclear medicine - GOV.UK, 2024*

XR-805	**Risk management** **Quality statement** The service identifies and manages risks to the service delivery. **Outcome measure** The service can demonstrate effective risk management. **Suggestions** • A risk management policy should be in place (this may be the wider organisation's policy). • Risk management and risk assessment should be supported by a comprehensive framework that defines roles, responsibilities, and mechanisms for action. • Effective risk management includes identifying and recording risks, reviewing, acting upon and escalating this also will include collecting and analysing safety data. • Risks and actions should be recorded in an up-to-date risk register. • The service should identify all risks. • The risk register should be kept up to date and formally reviewed in line with the wider organisation's risk policy timeframes. • Appropriate training should be provided for staff managing risk • Staff should be supported to discuss new and emerging risks, as well as strategies for risk mitigation. Staff should be encouraged to identify potential areas of concern. • The risk management framework should cover at least: a. Risks associated with technical imaging service delivery b. Risks associated with delivery of clinical care c. Feedback to staff about risks identified, action taken and learning. d. Communication and escalation as appropriate *Notes:* 1. *The risk assessment framework and management system should align with the wider organisation's risk management arrangements.* 2. *The risk register may exist in one single document, or in location-specific registers.* 3. *Reviewers will want to ask about the frequency of review and actions for risks that have remained on the register for some time.* 4. *Reviewers should check that risks given a higher rating have been considered for inclusion on the wider organisation's risk register.*

XR-806	**Service development and improvement** **Quality statement** The service has a development and improvement plan or strategy **Outcome measure** The service can demonstrate sustainable improvement in service provision through an integrated service level development plan with defined goals. **Suggestions** • The integrated service level plan should bring together the staffing, training, equipment and facilities plans for a determined amount of time. Services should align with the wider organisation's long-term plans. • The plan should reference the risk register and include potential risks such as resource constraints and anticipated future developments. • The service plan should align with the wider organisation's plan. • The service should be able to demonstrate a policy and process for regular review of the service development and improvement plan. • The service should be able to demonstrate how the QSs that measure patient experience, performance, delivery of KPIs and outcomes of audits have a link to the service improvement plan. • The service should demonstrate how the patient partnership described in XR-107 has informed the development of this plan. • The service should have systems for ongoing review and improvement of quality, safety and efficiency. • The service development and improvement plan should be formally reviewed by the senior management team of the service at least annually. • Where a service is part of a clinical imaging network, the service should demonstrate how this forward plan relates to this imaging network *Notes:* 1. *In the context of this QS, 'sustainable' means that there is, among other elements, communication and agreement to change with the key stakeholders, consideration of the impact of change and a process for review once implemented.* 2. *Reviewers should ask about the process for developing this plan.* 3. *Reviewers should ask about the engagement of patients and their carers in the development of the plan.* 4. *Reviewers should ask about the process for disseminating the plan to staff and stakeholders.* 5. *Reviewers should ask about any relationship to its relevant networks.*

Ref

CT-9 Computerised Tomography

The CT Service is expected to meet, where applicable, all the XR-*** quality statements. In addition, specific quality statements for CT are set out below.

Each of these QS is applicable where the service provides a clinical pathway relevant to all or part of the QS. Where the pathway is not provided, the QS is 'not applicable' rather than 'not met'.

Where the service provides additional pathways to those set out in the statements below, it is expected to follow the generic principles contained within these pathway statements.

Use of CT scanning as a part of molecular imaging (for example PET CT) is included in the nuclear medicine and molecular imaging quality statements.

CT-901	**Governance and safety systems** **Quality statement** The CT service maintains governance and safety systems to ensure high quality and safe delivery of CT services in alignment with national and professional regulations, standards, guidance and local policies. **Outcome measure** The service can demonstrate effective governance structures, regular review of safety protocols, and monitoring of compliance with national and professional regulations, standards and guidance. **Suggestions** • A documented governance framework, including roles, responsibilities, and reporting lines for support clinical, scientific, and managerial staff, see note 1. • Regular review and update of CT safety policies and procedures, including compliance with Ionising Radiation (Medical Exposure) Regulations (IR(ME)R), Health and Safety at Work Act, Human Medicines regulation and other relevant legislation. • Monitoring of compliance with legislation, regulatory and professional standards. • Clear protocols for patient identification, pregnancy checking, consent, and safeguarding, including management of vulnerable groups. • Routine quality control, regular safety audits and risk assessments for CT equipment, environment, and procedures. • Systems for incidents reporting, investigation, and learning, including near-misses and adverse events. • Staff training and competency records in clinical use of CT techniques, patient and staff safety, radiation protection, and emergency procedures. • Mechanisms for staff and patient involvement in safety and governance issues. • Virtual support technology is available for use in CT; this technology requires a comprehensive governance and safety assessment before implementation. • Evidence of action plans and improvements resulting from audit, incident review, and feedback. *Notes:* 1. *The governance framework may be met through the wider service's governance structure.* 2. *The governance framework should be aligned with the service and wider organisation's governance and risk management policies.* 3. *CT governance and safety systems should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *Safety systems should cover all aspects of CT service delivery, including equipment, environment, staff, and patient pathways.* 5. The service should regularly review and adapt governance and safety systems in response to regulatory changes, technological advances, and feedback. This QS does not specify what constitutes 'regularly'; service should decide the review intervals. 6. *Reviewers should look for evidence of sustainable improvements in CT safety, staff engagement, and patient outcomes linked to governance systems.* 7. *The Human Medicines Regulations 2012 Gov.UK* 8. *Guiding principles for implementing virtual support technology in CT and MRI, SoR* 9. *Position statement: Using virtual support technology in CT and MRI, SoR, 2025*

CT-902	**Staffing and training** **Quality statement** All staff working in CT are trained and entitled according to their level of practice and role. **Outcome measure** Systems are in place to ensure that all individuals practising within CT are trained and entitled and possess the necessary competencies. Staffing levels must be sufficient to ensure comprehensive coverage of the entire scope of CT services provided. **Suggestions** • Staff should have sufficient training to maintain competence in CT including IRMER and IRR compliance and medicines management according to their role. • The service should be able to demonstrate how, collectively, the competence of all staff links to the needs of the service. This may take the form of a competence matrix. • The service should ensure sufficient provision of suitably trained staff to deliver the CT service out of hours and 24/7 as required • A training and development programme should ensure that all staff have, and are maintaining, these competences and that opportunities for development are identified and actioned. • Records of additional training must be available as required by IR(ME)R. • The service supports post graduate training and career development and supporting of learners including radiology trainees within this speciality • Systems of work should be in place to prevent staff in CT undertaking any examinations for which they are not fully trained • Services should have in place programmes of support aimed at the integration and development of new professionals and staff new into CT. • Regular review of staffing levels, skill mix and training, with action plans for improvement, including responses to changes in service demand, technology, and best practice. Notes: 1. *Staff who are not trained in undertaking specific CT examinations must be directly supervised by a trained and entitled opporator until entitled.* 2. *Reviewers should understand how collectively the competency of all staff links to the delivery of the CT service.* 3. *Links to XR-705 and XR-501*

CT-903	**Trauma management** **Quality statement** The service meets national and professional standards and guidance for trauma management. **Outcome measure** The service has evidence that it has reviewed the standards and guidance and has assessed its ability to comply with the requirements identified, with an action plan for non-compliance. **Suggestions** • Local processes and procedures should be reviewed and updated to align with national standards and guidance • An action plan should be in place for addressing any gaps in compliance. *Notes:* 1. *Use of national standards and guidance without consideration of local implementation is not sufficient for compliance with this QS.* 2. *Regular comparison of benchmarking data from similar organisations should be undertaken in determining effective response times.* 3. *Trauma Quality standards, NICE, 2018* 4. *Major trauma: assessment and initial management, NICE, 2016* 5. *Major Adult Trauma Radiology Guidance, RCR, 2024*

CT-904	**Paediatric imaging** **Quality statement** Children and young people are imaged in line with national and professional standards and guidance. **Outcome measure** Specific and evidence-based protocols are in place for CT scanning of children and young people. **Suggestions** • These protocols are required under IR(ME)R 12(8)(a). • National and professional guidance should be used to inform local protocols. • Image optimisation and use of national and local diagnostic reference levels should be set out in protocols for the imaging of children and young people. • The protocols in this QS should be consistent with those in XR-704. • The paediatric lead and the MPE should be involved in the development and approval of the protocols in this QS. • Paediatric CT procedures should ideally only be undertaken by designated, trained and entitled clinicians. • Paediatric interventions should ideally be undertaken by specialist staff in facilities designated for this purpose. • Where possible, paediatric patients should be imaged on a designated list. • Staff should be trained in effective communication methods for paediatric patients and their parents or guardians to gain valid informed consent and co-operation. • Services should consider the use of play specialists and equipment, such as toy scanners, to help children and young people understand their procedure and alleviate anxiety. • Procedures should be in place to manage sedation and use of medicines. • A named consultant anaesthetic lead who is responsible for ensuring that the requirements for anaesthesia in CT are met should be identified. • Paediatric CT may require the transfer of the patient to another facility or provider unit. Arrangements and responsibilities should be agreed in advance between providers. Where possible, the service should have consistent network arrangements. *Notes:* 1. *Use of national guidance without consideration of local implementation is not sufficient for compliance with this QS.* 2. *These protocols are required under IR(ME)R 12(8)(a).* 3. *Reviewers should ensure that dose optimisation for children is in line with 'DH Expert Working Party Response to the Committee on Medical Aspects of Radiation in the Environments 16th report 'Patient dose issues resulting from the use of CT in the UK'* 4. *'The Image Gently Alliance is a coalition of healthcare organisations dedicated to providing safe, high-quality paediatric imaging worldwide. Their guidance is available to support services in paediatric imaging.* 5. *'Imaging Children: Immobilisation, Distraction Techniques and Use of Sedation' (2012), SoR* 6. *The radiological investigation of suspected physical abuse in children, SoR , 2018* 7. *Major paediatric trauma radiology guidance, The Royal College of Radiologists, 2024*

Ref	Standard

IR-9 Interventional Radiology

The Interventional Radiology Service is expected to meet, where applicable, all the XR-*** quality statements and the CT, MR and ultrasound modalities. In addition, specific quality statements for interventional Radiology are set out below.

Interventional radiology relies on multidisciplinary team (MDT) working between the imaging service and a range of other specialties such as nursing and anaesthetics. The service should demonstrate how this MDT working can be achieved effectively. These quality statements relate to the provision of an overall IR service rather than solely the element of the service delivered by staff within the imaging service.

Each of these QS is applicable where the service provides a clinical pathway relevant to all or part of the QS. Where the pathway is not provided the QS is ‘not applicable’ rather than ‘not met’.

Where the service provides additional pathways to those set out in the quality statements below, it is expected to follow the generic principles contained within these pathway quality statements.

IR-901	**Governance and safety systems** **Quality statement** The Interventional Radiology (IR) service maintains governance and safety systems to ensure high quality and safe delivery of its service in alignment with national and professional regulations, standards and guidance and local policies. **Outcome measure** The service can demonstrate effective governance structures, regular review of safety protocols, and monitoring of compliance with national and professional regulations standards and guidance. **Suggestions** • A documented governance framework, including roles, responsibilities, and reporting lines for clinical, technical, and managerial staff. • Regular review and update of IR safety policies and procedures, including compliance with Ionising Radiation (Medical Exposure) Regulations (IR(ME)R), Health and Safety at Work Act, Human Medicines regulations and other relevant legislation. • Clear protocols for patient identification, pregnancy checking, consent, and safeguarding, including management of vulnerable groups. • Designated IR safety lead(s) and governance committee with multidisciplinary representation (including radiologists, radiographers, nurses, anaesthetists, and support staff). • Systems for incident reporting, investigation, and learning, including near-misses and adverse events related to IR procedures. • Routine safety audits and risk assessments for IR equipment, environment, and procedures. • Staff training and competency records in IR safety, radiation protection, sedation/anaesthesia, and emergency procedures. • Clear protocols for patient identification, consent (including two-part consent), and safeguarding, including management of vulnerable groups, complex cases and in episodes of patient deterioration. • Mechanisms for staff and patient feedback on safety and governance issues. • Clinicians should attend morbidity and mortality meetings where relevant with actions and learning. • Evidence of action plans and improvements resulting from audit, incident review, and feedback. *Notes:* 1. *The governance framework may be met through the wider service's governance structure.* 2. *The governance framework should be aligned with the wider organisation's governance and risk management policies.* 3. *IR governance and safety systems should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *Safety systems should cover all aspects of IR service delivery, including equipment, environment, staff, and patient pathways.* 5. *The service should regularly review and adapt governance and safety systems in response to regulatory changes, technological advances, and feedback. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 6. *Reviewers should look for evidence of sustainable improvements in IR safety, staff engagement, and patient outcomes linked to governance systems.*

IR-902	**Staffing and training** **Quality statement** All staff working in IR are trained according to their role and level of practice. **Outcome measure** Systems are in place to ensure that all individuals practising within the IR service are trained and possess the necessary competencies. Staffing levels must be sufficient to ensure safe, effective and sustainable coverage across the full scope of IR services. **Suggestions** • A documented staffing plan for IR, reviewed to ensure adequate numbers and skill mix for all service requirements, including emergency and out-of-hours provision. • Defined roles and responsibilities for all IR staff, including radiologists, nurses, radiographers, and support staff. • Evidence of compliance with national guidance on safe staffing levels and skill mix for IR services. • Competency and capability frameworks for all IR roles, including mandatory training in radiation safety, sedation/anaesthesia, infection control, safeguarding, and emergency procedures. • Systems of work should be in place to prevent staff in IR undertaking any examinations for which they are not fully trained. • Structured induction and ongoing training programmes for new and existing staff, including opportunities for enhanced, advanced and consultant practice. • Records of staff training, competency and capability assessments, and continuing professional development (CPD). • The service supports post graduate education, training and career development, including radiology trainees within this speciality. • Services should have in place programmes of support aimed at the integration and development of new professionals and staff new into IR. • Regular review of staffing levels, skill mix, and training with action plans for improvement including responses to changes in service demand, technology, and best practice. *Notes:* 1. *The staffing and training plan should be aligned with the wider organisation's workforce strategy and reflect national professional guidance.* 2. *Training should be accessible to all staff, including those in part-time, locum, or remote roles.* 3. *Staffing and training standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *Reviewers should look for evidence of sustainable improvements in staff skills, retention, and service quality linked to staffing and training initiatives.*

IR-903	**Environment and equipment** **Quality statement** The interventional radiology service provides and maintains a safe, accessible environment, with high-quality, well-maintained equipment to support safe and effective clinical practice **Outcome measure** The service is provided in an environment that meets national and professional regulations, standards and guidance through identified processes and procedures. **Suggestions** • The service should meet the current guidance on the provision of IR facilities for the range of procedures being performed. • The services should consider how the environment and equipment support comfort, privacy, dignity, and safety of patients and staff. • There is a protocol for access to stock for IR procedures. • When required by the clinical procedures being undertaken, IR rooms should be constructed to theatre standard, in relation to air exchange, handwashing, hygiene, flooring etc. • Equipment and staffing for managing imaging of patients with additional needs should be available where required. • When required there should be a process in place to access day case beds. • Mechanisms for staff and patient feedback on the environment and equipment, with action plans for improvement. • All equipment should be appropriately optimised for the imaging investigation being undertaken. • Maintenance schedules and records for all equipment, including planned preventative maintenance, calibration, and prompt repair of faults. • Asset register for equipment, including details of safe operating weight limits, equipment age, and replacement plans. • Facilities and equipment that support the needs of patients with additional requirements. • Suitable arrangements for infection prevention and control, including cleaning protocols and decontamination of equipment, safety and ventilation, particularly where there may be fumes associated with the method used. *Notes:* 1. *Not all rooms undertaking interventional procedures will require a theatre standard environment.* 2. *Reviewers should note that theatre standards may need to recognise the constraints of having ceiling mounted equipment.* 3. *Department of Health: Health Building Notes HB6 or Health Facilities Scotland (HBN) 6.*

IR-904	**Paediatric imaging** **Quality statement** Children and young people are imaged in line with national and professional standards and guidance. **Outcome measure** Specific and evidence-based protocols are in place for IR procedures of children and young people. **Suggestions** • Paediatric IR procedures should ideally only be undertaken by designated clinicians trained in paediatric IR. • Paediatric IR should ideally be undertaken in facilities designated for that purpose. • Where clinical networks are in place to provide the required range of expertise, these will be documented. • Staff should be trained in effective communication methods for paediatric patients and their parents or guardians to gain valid informed consent and co-operation. • Services should consider the use of play specialists and equipment to help children and young people understand their treatment. • Procedures should be in place to manage sedation and use of medicines. • A named consultant anaesthetic lead who is responsible for ensuring that the requirements for anaesthesia in IR are met should be identified. • Paediatric IR may require the transfer of the patient to another facility or provider unit. Arrangements and responsibilities should be agreed in advance between providers. Where possible, the service should have consistent network arrangements. *Notes:* • *Network relationships may vary depending on the imaging procedures. Not all pathways will be to the same provider.* • *Reviewers should expect to see specific paediatric optimisation, for example specific acquisition protocols, see also XR-704.* • *Reviewers will want to ensure that changes to pathways as a result of compliance with this QS are sustainable. In this context, 'sustainable' means that there is, among other elements, communication and agreement to change with the key stakeholders, consideration of the impact of change and a process for review once implemented.*

IR-905	**Access and admissions** **Quality statement** Patients have timely 24hour, -seven-day access to -consultant directed Interventional Radiology (IR) procedures, supported by an admissions and -patient flow- process. **Outcome measure** A system is in place for all the procedures offered by the service, including those provided 24/7. There is effective management of patients requiring admission before or after their procedure **Suggestions** • A SOP should identify which procedures are available in hours and out of hours. • A system must be in place to provide a 24/7 IR service; this may be via an internal rota or SLA with another regional organisation. • If some procedures cannot be provided at certain times, an agreed referral pathway must be in place and communicated to referrers. • The responsible clinician must be identified at each stage, with clear handover arrangements. • Where staff on the rota are not part of the imaging establishment, robust communication and planning arrangements must be in place. • Pre-admission and discharge procedures should be defined in the pathway. • A process must be in place for urgent admissions. • A protocol should support safe and timely transfer of care between teams. • Agreements with wards should ensure timely assessment and preparation of patients, evidenced through audits of delays. • Out of- -hours emergency transfers should have agreed criteria and processes (within or between providers). • Agreements with receiving organisations should define their role in the pathway. *Notes:* 1. *The aim of this QS is to ensure a clear and reliable referral and admissions pathway for IR procedures, rather than define contractual arrangements.* 2. *Inpatient care processes themselves are not subject to review, but reviewers will expect assurance that roles and agreements are understood.*

Ref	Standard

MR-9 Magnetic Resonance Imaging

The MR service is expected to meet, where applicable, all the XR-*** quality standard. In addition, specific quality statements for MR are set out below.

In the context of these quality statements, the use of the term 'MR unit' refers to a specific MR scanner as a unique piece of equipment.

Each of these QS is applicable where the service provides a clinical pathway relevant to all or part of the QS. Where the pathway is not provided, the QS is 'not applicable' rather than 'not met'.

Where the service provides additional pathways to those set out in the quality statements below, it is expected to follow the generic principles contained within these pathway quality statements.

Use of MR as a part of molecular imaging (for example PET MR) is included in the nuclear medicine and molecular imaging quality statements.

MR 901	**Governance and safety systems** **Quality statement** The MR service maintains governance and safety systems to ensure high quality and safe delivery of MR services in alignment with national and professional regulations, standards and guidance and local policies. **Outcome measure** The service can demonstrate effective governance structures, regular review of safety protocols, and monitoring of compliance with national and professional regulations, standards and guidance. **Suggestions** • A documented governance framework, including roles, responsibilities, and reporting lines for clinical, scientific, and managerial staff. • The service has a designated MR responsible person, MR safety expert and MR authorised person(s) and named MR operators. • Regular review and update to MR local rules, including compliance with CEMFAW, Health and Safety at Work Act, Human medicines regulations and other relevant legislation. • Safety systems should cover all aspects of MR service delivery, including pre-screening, equipment, environment, safety of staff, visitors and patients. • Clear protocols for patient identification, pregnancy checking, consent, and safeguarding, including management of vulnerable groups. • Documented framework for safety screening of patients, visitors and staff. Safety screening of MR staff should take place annually or earlier if there is a relevant change. Safety screening of patients should begin at referral, or at the earliest stage possible. • MR governance/safety committee with multidisciplinary representation. • Systems for incident reporting internally and to relevant authorities, investigation, and learning, including near-misses and adverse events. • Staff training and competency records in MR safety, and emergency procedures. • There should be written protocols for management of implants, devices and any other safety considerations e.g. metallic foreign bodies in the eyes.

	• The service should have a protocol in place for dealing with cases of implants/devices where there is no assurance of MR safety from the manufacturers (off label scanning). • Mechanisms for staff and patient feedback on safety and governance issues. • The referral form for MR should clarify the responsibility of the referrer in safety screening, especially with regard to implanted devices. • Virtual support technology is available for use in MR, this technology requires a comprehensive governance and safety assessment before implementation. • The service should regularly review and adapt governance and safety systems in response to regulatory changes, technological advances, and feedback. *Notes:* 1. *The governance framework may be met through the wider service's governance structure.* 2. *The governance framework should be aligned with the wider organisation's governance and risk management policies.* 3. *MR governance and safety systems should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *Certification for the MRSE is not currently a requirement but is now available by IPEM for radiographers and radiologists 'MRSE Certificate of Competence'* 5. *MRSE does not need to be an employee of the organisation and can be on a consultancy basis.* 6. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 7. *Reviewers should look for evidence of sustainable improvements in MR safety, staff engagement, and patient outcomes linked to governance systems.* 8. Magnetic resonance imaging equipment in clinical use: safety guidelines - GOV.UK, 2022 9. *SoR Position statement Education and Training for Diagnostic Radiographers working in MRI IPEM, webpage* 10. *MRSE Certificate of Competence. IPEM, webpage* 11. *Safety Guidelines for Magnetic Resonance Imaging Equipment in Clinical Use MHRA, 2022* 12. *Guiding principles for implementing virtual support technology in CT and MRI, SoR, 2025* 13. *Position statement: Using virtual support technology in CT and MRI, SoR*, 2025 14. *Safety in Magnetic Resonance Imaging SoR and BAMRR, 2019*

MR 902	**Staffing and training** **Quality statement** All staff working in MR are trained according to their level of practice and role. **Outcome measure** Systems are in place to ensure that all individuals practising within MR are trained and possess the necessary competencies. Staffing levels must be sufficient to ensure safe, effective and sustainable coverage across the full scope of MR services. **Suggestions** • Staff should have sufficient training to maintain competence in MR according to their role, including MR safety, Physical principles and medicines management • The service should be able to demonstrate how, collectively, the competence of all staff links to the needs of the service. This may take the form of a competence matrix. • The service should ensure sufficient provision of suitably trained staff to deliver the MR service out of hours and 24/7 as required. • A training and development programme is available for all staff and should ensure that all staff have, and are maintaining, these competences and that opportunities for development are identified and actioned. • The service supports post graduate training and career development and supporting of learners including radiology trainees within this speciality. • Systems of work should be in place to prevent staff in MR undertaking any examinations for which they are not fully trained. • Service should consider training in softer skills such as managing anxiety and claustrophobia. • Records of all training should be available. • Regular review of staffing levels, skill mix and training, with action plans for improvement, including responses to changes in service demand, technology, and best practice. *Notes:* 1. *The staffing and training plan should be aligned with the wider organisation's workforce strategy and reflect national professional guidance.* 2. *Training should be accessible to all staff, including those in part-time, locum, or remote roles.* 3. *Staffing and training standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *Reviewers should look for evidence of sustainable improvements in staff skills, retention, and service quality linked to staffing and training initiatives.* 5. *Position Statement: Education and training of diagnostic radiographers working in MRI, SoR, 2024*

MR 903	**Environment and equipment** **Quality statement** The MR service provides and maintains a safe, accessible environment, with high-quality, well-maintained equipment to support safe and effective clinical practice **Outcome measure** The service is provided in an environment that meets national and professional regulations, standards and guidance through identified processes and procedures. **Suggestions** • The services should consider how the environment and equipment support comfort, privacy, dignity, and safety of patients and staff. • The MR controlled access area of each MR unit should be identified, and access secured. • Adequate, clearly visible signage should be in place at the entrances to the MR controlled access area and the MR environment. • There should be space allocated for private conversations, preparation areas and changing areas to maintain the privacy and dignity of patients. • Risk assessments of electromagnetic fields and the impact of the hazards in the MR unit should be undertaken. • A procedure for emergency situations should be in place. Staff should be familiar with the procedure and their responsibilities. • Equipment in use in the MR service should be labelled (and staff should have a clear understanding of the difference between the labels) with one of the following: a. MR safe b. MR conditional c. MR unsafe d. MR Unlabelled, see note 2 • A list of equipment marked MR conditional should be held in the control room that identifies the constraints that led to the conditional labelling. • When services are required to utilise relevant MR conditional equipment within the MR environment. Services should consider defining regions or zones related to specific equipment and their allowed proximity to the scanner. There should be consultation with an MRSE. • When MR equipment produces noise which might cause damage, appropriate hearing protection should be supplied for patients, staff and other people in the noisy environment. Special care should be taken with neonates, paediatric patients, those who are unconscious and those who have special sensitivity to noise. • Temperature, oxygen levels and humidity should be regularly monitored. • Image quality assurance tests should be undertaken according to an agreed schedule. • Parameters for tolerances should be agreed before checks are undertaken. • Equipment and staffing for managing imaging of patients with additional needs should be available where required. • Mechanisms for staff and patient feedback on the environment and equipment, with action plans for improvement. • Maintenance schedules and records for all equipment, including planned preventative maintenance, calibration, and prompt repair of faults. • Asset register for equipment, including details of safe operating weight limits, equipment age, and replacement plans. • Facilities and equipment that support the needs of patients with additional requirements

	• Suitable arrangements for infection prevention and control, including cleaning protocols and decontamination of equipment, safety and ventilation, particularly where there may be fumes associated with the method used. *Notes:* 1. *The environment and equipment policy should be aligned with the wider organisation's facilities and equipment strategy where applicable.* 2. *The service should regularly review and adapt its environment and equipment arrangements in response to changes in service demand, technology, and best practice.* 3. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 4. *Relevant MR conditional equipment is any equipment that needs to enter the MR environment with a condition linked to static field strength. For example: dedicated MR anaesthetic machines and dedicated MR infusion pumps.* 5. *Reviewers should look for evidence of sustainable improvements in patient experience, staff safety, and service quality linked to environment and equipment initiatives.* 6. *Current guidance for facilities includes Department of Health: Health Building Notes HB6 or Health Facilities Scotland (HBN) 6. Services should ensure they are referring to the latest guidance. Safety guidelines for Magnetic Resonance Imaging equipment in clinical use, 2021.* 7. *NHS England Health building notes*

MR-904	**Paediatric imaging** **Quality statement** Children and young people are imaged in line with national and professional standards and guidance. **Outcome Measure** Specific and evidence-based protocols are in place for MR scanning of children and young people. **Suggestions** • National and professional guidance should be used to inform local protocols. • The protocols in this QS should be consistent with the protocols in XR-704. • The paediatric lead should be involved in the development and approval of the protocols in this QS. Where appropriate the MR safety expert should be consulted. • Paediatric MR procedures should ideally only be undertaken by designated, trained clinicians. • Paediatric interventions should ideally be undertaken by specialist staff in facilities designated for that purpose. • Where possible, paediatric patients should be imaged on a designated list. • Staff should be trained in effective communication methods for paediatric patients and their parents or guardians to gain valid informed consent and co-operation. • Services should consider the use of play specialists and equipment, such as toy scanners, to help children and young people understand their procedure and alleviate anxiety. • Procedures should be in place to manage sedation and use of medicines. • A named consultant anaesthetic lead who is responsible for ensuring that the requirements for anaesthesia in MR are met should be identified. • Paediatric MR may require the transfer of the patient to another facility or provider unit. Arrangements and responsibilities should be agreed in advance between providers. Where possible, the service should have consistent network arrangements. *Notes:* 1. *Use of national guidance without consideration of local implementation is not sufficient for compliance with this QS.* 2. *Reviewers will want to be assured that staff working in the unit are familiar with the content of these protocols.* 3. *'Imaging Children: Immobilisation, Distraction Techniques and Use of Sedation' (2012), SoR* 4. *The radiological investigation of suspected physical abuse in children, SoR , 2018* 5. *Major paediatric trauma radiology guidance, The Royal College of Radiologists, 2024*

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Ref	Standard

NM-9 Nuclear Medicine and Molecular Imaging

This section also incorporates hybrid molecular imaging modalities such as SPECT/CT, PET/CT and PET/MR. Where CT and MR are used in combination with nuclear medicine and molecular imaging, the CT and MR elements of that approach will be covered by the CT and MR quality statements, to avoid duplication. The use of hybrid technology will require determination of which quality statements are applicable to the service.

Non-imaging aspects of nuclear medicine are not within the scope of these quality statements.

NM-901	**Governance and safety systems** **Quality statement** The nuclear medicine service maintains governance and safety systems to ensure high quality and safe delivery of nuclear medicine services in alignment with national and professional regulations, standards and guidance and local policies. **Outcome measure** The service can demonstrate effective governance structures, regular review of safety protocols, and monitoring of compliance with national and professional regulations, standards and guidance. **Suggestions** • A documented governance framework, including roles, responsibilities, and reporting lines for support clinical, scientific, and managerial staff, see note 1. • The framework should set out the working relationships with: a. Imaging services b. Pharmacy/Radiopharmacy c. Clinical scientific services • The role of the MPEs, RPA and RWA must be defined in line with regulations. • The staffing level of MPEs must be compliant with the recommendations from ARSAC. • The service must comply with Environmental Permitting (England and Wales) Regulations 2016/Radioactive Substances regulations, IR(ME)R and IRR regulations Health and Safety at Work Act, Human Medicines regulation and other relevant legislation. • Monitoring of compliance with legislation, regulatory and professional standards. • Clear protocols for patient identification, pregnancy checking, consent, and safeguarding, including management of vulnerable groups. • Routine quality control, regular safety audits and risk assessments for NM equipment, environment, and procedures. • There should be arrangements for relationships with other nuclear medicine and molecular imaging services when a network or mutual support arrangement is in place. • Response times should be agreed and reporting processes defined. • Out-of-hours' and urgent referrals processes should be agreed and documented. • Systems for incident reporting internally and to relevant authorities, investigation, and learning, including near-misses and adverse events.

	• Staff training and competency records in NM safety, and emergency procedures, including management of Radioactive materials. • Mechanisms for staff and patient involvement in safety and governance issues. • Evidence of action plans and improvements resulting from audit, incident review, and feedback. *Notes:* 1. *The governance framework may be met through the wider service's governance structure.* 2. *The governance framework should be aligned with the wider organisation's governance and risk management policies.* 3. *Reviewers should look for evidence of sustainable improvements in MR safety, staff engagement, and patient outcomes linked to governance systems.* 4. *Environmental Permitting (England and Wales) Regulations 2016/Radioactive Substances regulations currently in place.*

NM-902	**Staffing and training** **Quality statement** All staff working in Nuclear Medicine are trained according to their role and level of practice. **Outcome measure** Systems are in place to ensure that all individuals practising within nuclear medicine are trained and possess the necessary competencies. Staffing levels must be sufficient to ensure safe, effective and sustainable coverage across the full scope of nuclear medicine service. **Suggestions** • A documented staffing plan for nuclear medicine, regularly reviewed to ensure adequate numbers and skill mix for all service requirements, including emergency and out-of-hours provision. • Defined roles and responsibilities for all nuclear medicine staff, including clinical scientists, radiographers, technologists, radiologists, nurses, and support staff. • Evidence of compliance with national guidance on safe staffing levels and skill mix for nuclear medicine services. • Competency frameworks for all nuclear medicine roles, including mandatory training in radiation safety, radiopharmaceutical handling, infection control, safeguarding, and emergency procedures. • Structured induction and ongoing training programmes for new and existing staff, including opportunities for advanced and consultant practice. • Records of staff training, competency assessments, and continuing professional development (CPD). • Mechanisms for staff feedback on training needs and opportunities. • The service supports post graduate training and career development and supporting of learners including radiology trainees within this speciality. • Regular review of staffing levels, skill mix and training, with action plans for improvement, including responses to changes in service demand, technology, and best practice. *Notes:* 1. *The staffing and training plan should be aligned with the wider organisation's workforce strategy and reflect national professional guidance.* 2. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 3. *Training should be accessible to all staff, including those in part-time, locum, or remote roles.* 4. *Staffing and training standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 5. *Reviewers should look for evidence of sustainable improvements in staff skills, retention, and service quality linked to staffing and training initiatives.*

NM-903	**Environment and equipment** **Quality statement** The Nuclear Medicine service provides and maintains a safe, accessible environment, with high-quality, well-maintained equipment to support safe and effective clinical practice. **Outcome measure** The service is provided in an environment that meets national and professional standards and guidance through identified processes and procedures. **Suggestions** • The service should meet the current guidance on the provision of nuclear medicine and molecular imaging facilities including the facilities for the use of radiopharmaceuticals for the patient groups being imaged are compliant with current guidance. • Compliance with radiopharmacy standards must be ensured by regular QA and mandatory inspections by the MHRA. • If services are provided in non-compliant facilities, risk management should be agreed by the service leadership and include an action plan with timescales, and named responsible individuals should be produced. • A dedicated area to prepare and draw up radiopharmaceuticals should be available. • The services should consider how the environment and equipment support comfort, privacy, dignity, and safety of patients and staff. • A documented policy for the provision, maintenance, and replacement of equipment, aligned with national guidance and local requirements. • Regular risk assessments and audits of the environment, including infection control, privacy, accessibility, and suitability for all patient groups. • Maintenance schedules and records for all equipment, including planned preventative maintenance, calibration, and prompt repair of faults. • Asset register for equipment, including details of safe operating weight limits, equipment age, and replacement plans. • Facilities and equipment that support the needs of patients with additional requirements. • Suitable arrangements for infection prevention and control, including cleaning protocols and decontamination of equipment. • Regular review and adaptation of the environment and equipment in response to feedback, technological advances, and changes in clinical practice. • Mechanisms for staff and patient feedback on the environment and equipment, with action plans for improvement. • Suitable arrangements for infection prevention and control, including cleaning protocols and decontamination of equipment, safety and ventilation, particularly where there may be fumes associated with the method used. *Notes:* 1. *The environment and equipment policy should be aligned with the wider organisation's facilities and equipment strategy.* 2. *The service should regularly review and adapt its environment and equipment arrangements in response to changes in service demand, technology, and best practice. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 3. *Reviewers should look for evidence of sustainable improvements in patient experience, staff safety, and service quality linked to environment and equipment initiatives.*

	4. *Standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives*. 5. *Current guidance for facilities includes Department of Health: Health Building Notes HB6 or Health Facilities Scotland (HBN) 6*.

NM-904	**Paediatric imaging** **Quality statement** Children and young people are imaged in line with national and professional guidance. **Outcome measure** Specific and evidence-based protocols are in place for nuclear medicine and molecular imaging of children and young people. **Suggestions:** • When developing clinical imaging protocols, the service should refer to clinical guidelines issued by the relevant professional bodies. • Protocols must comply with IR(ME)R regulation 6(4) and 12(8). • Paediatric NM procedures should ideally be undertaken by designated clinicians trained in paediatric NM. • Staff should be trained in effective communication methods for paediatric patients and their parents or guardians to gain valid informed consent and co-operation. • Services should consider the use of play specialists and equipment, such as toy scanners, to help children and young people understand their procedure and alleviate anxiety. • Procedures should be in place to manage sedation and use of medicines. • A named consultant anaesthetic lead who is responsible for ensuring that the requirements for anaesthesia in NM are met should be identified. • Paediatric NM may require the transfer of the patient to another facility or provider unit. Arrangements and responsibilities should be agreed in advance between providers. Where possible, the service should have consistent network arrangements. • The service should regularly audit against these protocols, and the audits should be cross-referenced to any incidents or non-compliance reported. *Notes:* 1. *Use of national guidance without consideration of local implementation is not sufficient for compliance with this QS.* 2. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 3. *Reviewers will want to be assured that the pathway- and condition-specific guidelines are relevant to the service(s) being provided. They should be sufficient to cover at least all the areas commonly provided by the service.* 4. *Reviewers should expect to see that relevant guidance has been considered in the context of local delivery and adapted for use within the service. This QS cannot be met by generic reference to national guidelines without local consideration.*

NM-905	**Management of radiopharmaceuticals and radioactive materials** **Quality statement** National standards for the use of radiopharmaceuticals and radioactive materials are followed within the service. **Outcome measure** The service can provide evidence of compliance with national regulations on the use, receipt, storage and transport of radioactive materials and radiopharmaceuticals. **Suggestions:** • Suitably experienced and certificated regulatory experts should be appointed in writing (MPE, RPA, RWA). • A report assessing regulatory compliance should be provided at least annually. • The report should be considered by the service radiation safety meeting/governance meeting, and action plans to achieve compliance agreed where required. • Reporting must include: a. Ionising Radiation (Medical Exposure) Regulations (IR(ME)R) 2017 b. Employer's IR(ME)R procedures c. ARSAC licensing (employer and practitioner) d. Ionising Radiation Regulations (IRR) e. HSE authorisation f. Environmental Permitting Regulations g. Environmental permits h. Carriage of Dangerous Goods Regulations • A standard operating procedure for radiopharmaceuticals should set out: a. How they are ordered b. Arrangements for their transport c. Procedures for their receipt (including a dedicated receiving point and authorised personnel to accept receipt and return) d. Procedures for their storage e. Out-of-hours' arrangements f. Procedures for their consignment (for example waste for off-site incineration) *Notes:* 1. *This QS relates to XR-501 and where the nuclear medicine department is not a stand-alone service there will be some overlap.* 2. *The report to demonstrate compliance is not specified and may be the report of another agency in so far as it meets the requirements of the outcome measure.* 3. *This QS is to cover arrangements for an imaging facility that is supplied with radiopharmaceuticals by an off-site radiopharmacy, not for a complete transport operation.* 4. *When a service takes responsibility for the transport of radiopharmaceuticals (across site, between sites or to another site), procedures for safe transport will apply. Aspects of transport by a third-party provider (other than reporting when these are outside the legislative framework) are outside the scope of these QS.* 5. *Reviewers will want to understand how the arrangements for receipt are understood by those delivering the radiopharmaceuticals.* 6. *Appropriate national regulations for each country should be followed. These include, without limitation: the Ionising Radiation (Medical Exposure) Regulations 2017 (IR(ME)R), Ionising Radiation (Medical Exposure) Regulations 2018 (NI), the Ionising Radiation Regulations 2017 (IRR), the Environmental Permitting (England*

	and Wales) Regulations 2016 (EPR), the Environmental Authorisations (Scotland) Regulations 2018 (EASR), the Radioactive Substances (Modification of Enactments) Regulations (Northern Ireland) 2018, and the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009.

Ref	Standard

US-9 Ultrasound

The ultrasound service, whether managed within the imaging service or as a stand-alone service, is expected to meet, where applicable, all the XR-*** quality statements. In addition, specific quality statements for US are set out below.

Each of these QS is applicable where the service provides a clinical pathway relevant to all or part of the QS. Where the pathway is not provided, the QS is 'not applicable' rather than 'not met'.

Where the service provides additional pathways to those set out in the statements below, it is expected to follow the generic principles contained within these pathway statements.

In the following QS the term ultrasound practitioner has been used to mean anyone undertaking an ultrasound examination for which they have been deemed competent.

US-901	**Governance and safety systems** **Quality statement** The ultrasound service maintains governance and safety systems to ensure high quality and safe delivery of ultrasound services in alignment with national and professional regulations, standards and guidance and local policies. **Outcome measure** The service can demonstrate effective governance structures, regular review of safety protocols, and monitoring of compliance with national and professional regulations, standards and guidance. **Suggestions** • A documented governance framework, including roles, responsibilities, and reporting lines for support clinical, scientific, and managerial staff. • Working practices should be reviewed in line with current regulations and guidance from the Health and Safety Executive. • The service should have considered national practice to reflect the local delivery of the service, including but not limited to the guidance from BMUS, SoR, RCR, Fetal Anomaly screening programme, the College and Society for Clinica Vascular Science and the NICE guidelines. • Clear protocols for justification of referral, patient identification, consent, chaperone and safeguarding, including management of vulnerable and additional need groups, intimate examinations, interventional procedures and medicines management. • Services should consider the governance of Point of Care Ultrasound delivery where applicable. • Systems in place to protect the sonographer and the patient undergoing an ultrasound examination. • Designated sonographers should undertake risk assessments of all procedures in line with the employer's agreed protocols. • Response and appointment times should be determined according to local need and national and professional guidelines. Reporting processes should be defined. • Out-of-hours' and urgent referrals processes should be agreed and documented. • Systems for incident reporting internally and to relevant authorities, investigation, and learning, including near-misses and adverse events. • Staff training and competency records in US safety, and emergency procedures. • Mechanisms for staff and patient feedback on safety and governance issues. **Notes** 1. *The governance framework may be met through the wider service's governance structure.* 2. *The governance framework should be aligned with the wider organisation's governance and risk management policies.* 3. *Safety systems should cover all aspects of US service delivery, including equipment, environment, staff, and patient pathways.* 4. *The service should regularly review and adapt governance and safety systems in response to regulatory changes, technological advances, and feedback. This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 5. *US governance and safety systems should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 6. *Reviewers should look for evidence of sustainable improvements in US safety, staff engagement, and patient outcomes linked to governance systems.*

	7. *BMUS Recommended Audit Tool, BMUS*, 2014 8. *Combined Guidance for the Safe Use of Medical Ultrasound, BMUS*, 2025

US-902	**Staffing and training** **Quality Statement:** All staff working in the Ultrasound service are trained according to their role and level of practice. **Outcome Measure:** Systems are in place to ensure that all individuals practising within ultrasound are trained and entitled and possess the necessary competencies. Staffing levels must be sufficient to ensure safe, effective and sustainable coverage across the full scope of the ultrasound services. **Suggestions:** • A documented staffing plan for US, regularly reviewed to ensure adequate numbers and skill mix for all service requirements, including emergency and out-of-hours provision. • Defined roles and responsibilities for all US staff, including radiologists, sonographers, nursing and support staff. • Competency frameworks for all US roles. • Structured induction, preceptorship and ongoing training and supervision programmes for new and existing staff, including opportunities for advanced and consultant practice. • Services should have in place programmes of support aimed at the integration and development of new professionals and staff new into US. • Records of staff training, competency assessments, and continuing professional development (CPD). • Sonographers should be trained in risk assessment and the ergonomic use of ultrasound equipment in order to minimise work-related musculoskeletal disorders (MSD). • Services should consider access to support for early signs of work-related MSK disorders • Ultrasound operators and support staff should be trained and audited in the use of products and devices for decontaminating ultrasound transducers and equipment. • Support for staff to attend external courses, conferences, and professional meetings relevant to US. Staff should be supported to undertake audit, QA and research activities. • Training should be accessible to all staff, including those in part-time, locum, or remote roles. • Assessment of qualifications and skills when employing sonographers with recruitment in line with SoR and BMUS guidance. • Mechanisms for staff feedback on training needs and opportunities. • Regular review of staffing levels, skill mix and training, with action plans for improvement, including responses to changes in service demand, technology, and best practice. **Notes** 1. *The staffing and training plan should be aligned with the wider organisation's workforce strategy, where applicable and reflect national professional guidance.* 2. *Training should be accessible to all staff, including those in part-time, locum, or remote roles.* 3. *Staffing and training standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 4. *The service should regularly review and adapt staffing and training arrangements in response to changes in service demand, technology, and best practice.*

	5. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 6. *Reviewers should look for evidence of sustainable improvements in staff skills, retention, and service quality linked to staffing and training initiatives.* 7. *Reviewers will want to ensure that safeguarding and responsibilities regarding female genital mutilation (FGM) are understood by all staff working within gynaecology ultrasound.* 8. *Guidelines for the Management of Safety when training. BMUS, 2018* 9. *Professional ultrasound practice guidelines updated for 2023 | SoR* 10. *Recommendations for specialists practising ultrasound independently of radiology departments: safety, governance and education | The Royal College of Radiologists,2023*

US-903	**Environment and equipment** **Quality statement** The ultrasound service provides and maintains a safe, accessible environment, with high-quality, well-maintained equipment to support safe and effective clinical practice. **Outcome measure** The service is provided in an environment that meets national and professional standards and guidance through identified processes and procedures. **Suggestions** • The service can demonstrate that the environment and equipment meet national and local standards for safety, accessibility, and clinical effectiveness. • A documented policy for the provision, maintenance, and replacement of ultrasound equipment, aligned with national guidance and local requirements. • Regular risk assessments and audits of the ultrasound environment, including infection control, privacy, accessibility, and suitability for all patient groups. • The services should consider how the environment and equipment support comfort, privacy, dignity, and safety of patients and staff. • Maintenance schedules and records for all ultrasound equipment, including planned preventative maintenance, calibration, and prompt repair of faults. • Asset register for ultrasound equipment, including details of safe operating weight limits, equipment age, and replacement plans. • Equipment for the operator, facilities and the structure of the clinical lists should be designed to reduce risks of the occurrence of musculoskeletal disorder. • Provision of appropriate moving and handling aids, gowns, and chaperones to support patient dignity and safety. • Facilities and equipment that support the needs of patients with additional requirements. • Suitable arrangements for infection prevention and control, including cleaning protocols and decontamination of equipment, safety and ventilation, particularly where there may be fumes associated with the method used. • Regular review and adaptation of the environment and equipment in response to feedback, technological advances, and changes in clinical practice. • Mechanisms for staff and patient feedback on the environment and equipment, with action plans for improvement. *Notes:* 1. *The environment and equipment policy should be aligned with the wider organisation's facilities and equipment strategy where applicable.* 2. *The service should regularly review and adapt its environment and equipment arrangements in response to changes in service demand, technology, and best practice.* 3. *This QS does not specify what constitutes 'regularly'; service should decide the review intervals.* 4. *Standards should be embedded in everyday practice, not limited to policy documents or isolated initiatives.* 5. *Reviewers should look for evidence of sustainable improvements in patient experience, staff safety, and service quality linked to environment and equipment initiatives.* 6. Ultrasound Use Equipment Checklist, AXREM, 2023 7. *Ultrasound Transducer Decontamination – Best Practice Summary, AXREM, 2020* 8. *Good infection prevention practice: using ultrasound gel, UKHSA* 9. *Preventing retention of sheaths, 'foreign objects' and ultrasound probe covers following intimate and invasive radiological procedures, SoR*

US-904	**Paediatric imaging** **Quality Statement:** Children and young people are imaged in line with national and professional standards and guidance **Outcome Measure:** Specific and evidence-based protocols are in place for ultrasound scanning of children and young people. **Suggestions** • The service should have considered national practice to reflect the local delivery of the paediatric service, including but not limited to the guidance provided by the British Medical Ultrasound Society, SoR, RCR and NICE. • The protocols in this QS should be consistent with those in XR-704. • Paediatric US procedures should only be undertaken by trained and competent clinicians. • Services should consider the use of equipment to minimise anxiety. • Staff should be trained in effective communication methods for paediatric patients and their parents or guardians to gain valid informed consent and co-operation • Services should consider the use of play specialists and equipment to help children and young people understand their procedure. • Procedures should be in place to manage sedation and use of medicines. • Paediatric US may require the transfer of the patient to another facility or provider unit. Arrangements and responsibilities should be agreed in advance between providers. Where possible, the service should have consistent network arrangements. *Notes:* 1. *Use of national guidance without consideration of local implementation is not sufficient for compliance with this QS. Reviewers should expect to see that all guidance has been considered in the context of local delivery and adapted for use within the service.* 2. *Reviewers will want to be assured that the paediatric pathway- and condition-specific guidelines are relevant to the service(s) being provided. The guidelines should be sufficient to cover at least all the areas commonly provided by the service.* 3. *Reviewers should note that the current SoR and BMUS guidance is helpfully summarised by pathway.* 4. *Reviewers will want to ensure that safeguarding and responsibilities regarding FGM are understood by all staff working within the paediatric clinical imaging protocols, see US-902.* 5. *Recommendations for education and training of specialist paediatric sonographers, SoR, 2023*

Glossary of Terms and Abbreviations

Glossary of terms and abbreviations	
Advocacy	Advocacy means to speak up for someone. It is about making things change because people's voices are heard and listened to. It's about making sure that people can make their own choices in life and have the chance to be as independent as they want to be.
Artificial Intelligence (AI)	The use of computer programs to perform tasks or reasoning processes that are related to medical services and care delivery. The use of digital technology to create systems capable of performing tasks commonly thought to require human intelligence.
ARSAC	Administration of Radioactive Substances Advisory Committee. ARSAC advises the licensing authorities on applications from practitioners, employers and researchers who want to use radioactive substances on people.
BMUS	British Medical Ultrasound Society.
Carer	Throughout the quality statements the term 'carer' applies to both family carers and paid carers or support workers.
COR	College of Radiographers.
CPD	Continuing professional development
CQC	The Care Quality Commission is the independent regulator of health and social care in England.
DEXA	Dual-energy X-ray absorptiometry. A bone density scan using X-rays.
DoH&SC	Department of Health and Social Care.
Doc	Documentation should be available. Documentation may be in the form of a website or other social media. (Identified evidence sources within the QSI.)
EASR	Environmental Authorisations (Scotland) Regulations 2018
EPR	Electronic patient records
eGFR	Estimated glomerular filtration rate. A test to measure renal function.
Freedom To Speak Up Guardian	Independent support and advice to staff who want to raise concerns
HCPC	Health and Care Professions Council. The HCPC has four main functions. In the context of this document, the main function is to keep a register of professionals, known as 'registrants' who meet the required standard.
HSSIB	Healthcare Safety Investigation Branch. Conducts independent investigations of patient safety concerns in NHS-funded care across England.
IPEM	Institute of Physics and Engineering in Medicine.
IR(ME)R	The Ionising Radiation (Medical Exposure) Regulations 2017and the Ionising Radiation (Medical Exposure) Regulations (NI) 2018.
IRR	Ionising Radiation Regulations.
Machine Learning	Machine learning is a subset of AI that uses algorithms and technologies to enable systems to identify patterns, make decisions, and improve themselves through experience and data.

Glossary of terms and abbreviations	
MDT	Multidisciplinary Team
MPE	Medical physics expert. An individual having the knowledge, training and experience to act or give advice on matters relating to radiation physics applied to medical exposure.
MHRA	The Medicines and Healthcare products Regulatory Agency. It regulates medicines, medical devices and blood components for transfusion in the UK.
MRRP	Magnetic resonance responsible person. Day-to-day responsibility for safety. Provides continuity and consistency for the ongoing safe working practices of the department.
MRSE	Magnetic resonance safety expert. Provides scientific advice to MR units including advising and monitoring of local safety procedures. Usually, a medical physicist who is a HCPC registered clinical scientist.
Network	A group of organisations working together and sharing experiences and learning for a common purpose. Each organisation remains independent from each other for its accountability and corporate governance.
NICE	National Institute for Health and Care Excellence.
PACS	Picture archiving and communication system. At its basic level, it is a system for storing and managing digital images. See also RIS.
PGD	Patient group direction. A written instruction that allows specific registered healthcare professionals to supply and/or administer certain medicines (POMs) to a defined group of patients, without the need for a prescription or individual instruction from a prescriber.
Provider	A health or social care organisation which provides services to patients.
PSD	a written instruction from a prescriber (doctor, dentist, or non-medical prescriber) to supply or administer a medicine to a named patient after the prescriber has assessed that patient individually.
QS	Quality statement.
RCR	The Royal College of Radiologists
REALM	Radiology Events and Learning Meeting
RIS	Radiology information systems. A networked software system for managing medical images and associated data. See also PACS.
RPA	Radiation protection adviser. Competent to advise employers on the safe and compliant use of Ionising Radiations. The post is a legally recognised position and is a requirement of the Ionising Radiations Regulations 2017.
RWA	Radioactive waste adviser. A specialist in radioactive waste disposal and environmental radiation protection.
SoR	Society of Radiographers

Return to Index