Quality Standard for Imaging Networks

Contents

Introduction and context

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Introduction

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Put simply, networks are a group or system of interconnected people or things. They can play many roles in healthcare delivery: driving change and collaboration across complex organisational structures; enabling the best service for patients and staff, and uniting professionals with common clinical interests.

Networks, if effectively supported and harnessed, can offer solutions to tackling systemic and complex problems faced by an NHS beholden to financial pressures and chronic staff shortages.

The Quality Standard for Imaging Networks (QSIN) is consistent with the national direction to develop imaging networks. Imaging networks have been developed throughout the UK with seven network regions in England and one network in each for Northern Ireland, Scotland and Wales. An imaging network may also be formed

by a company to oversee all the imaging departments it has or an informal group of imaging entities who want to form a network.

Although these imaging network quality standards have been published independently from the [Quality Standard for Imaging 2021 (QSI 2021)](), it is envisaged that, as imaging networks develop, the QSIN will be an integral part of the QSI.

The QSIN is made up of a number of quality statements which are aimed to complement QSI 2021.

Scope of the Quality Standard for Imaging Networks

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The QSIN is written to stand alone; and emerging or nascent networks can use it as part of an internal quality improvement programme. All processes developed for quality improvement should be embedded and in routine use to achieve a culture of quality. While led from the top of the service, a culture of quality is everyone's responsibility.

These standards are designed to encourage all services to become part of an imaging network, with the benefits of mutual support and learning this brings.

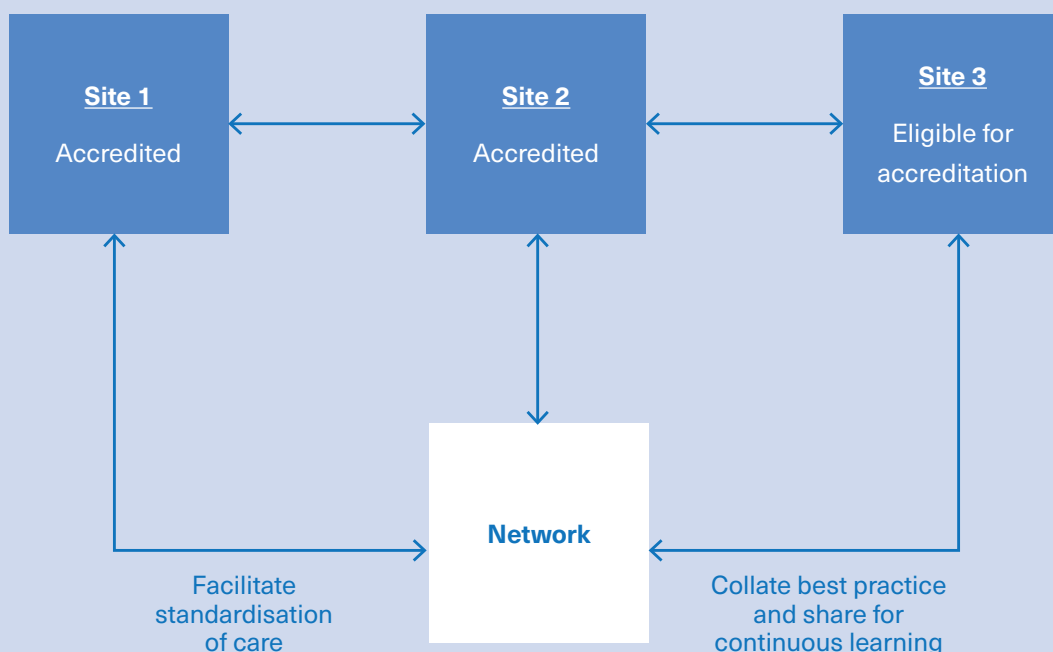The QSIN will be reviewed and refreshed regularly using a four yearly cycle.

Aims

The Quality Standard for Imaging Networks (QSIN) is designed to encourage all services to become part of an imaging network, with the benefits of mutual support and learning this brings. It aims to help both existing and emerging networks drive forward quality improvement across multiple sites for the benefit of patients. It requires a culture of quality and vision for best practice.

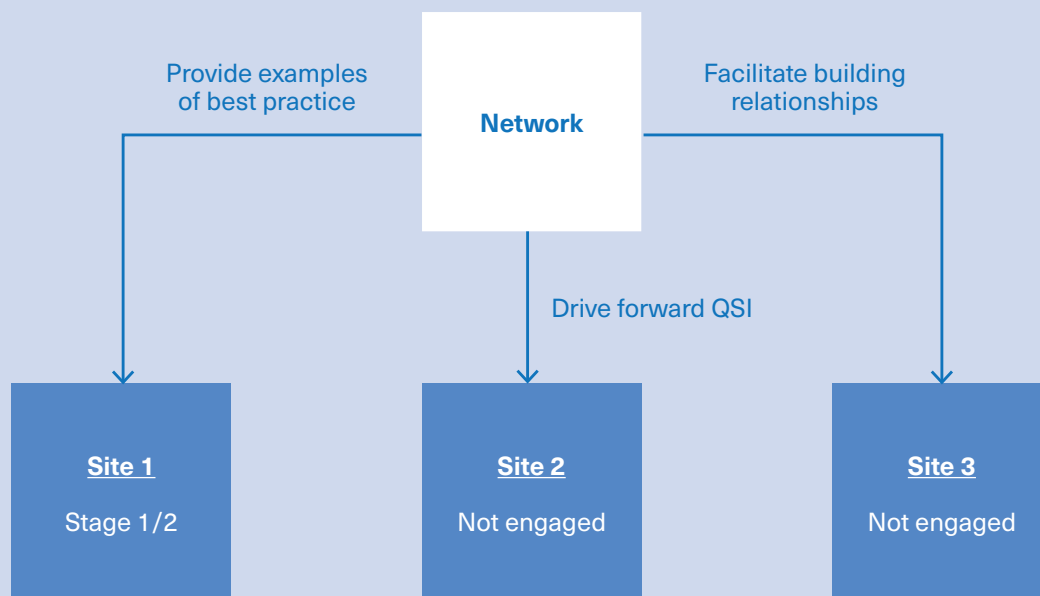## Implementation of these standards could take several different forms:

1 **Bottom up:**

Where most sites within the network are already QSI accredited or eligible for accreditation. The network will collate and share best practice across all sites and facilitate standardisation of practice. This will ensure the best possible service for patients and smooth transition of care between the sites.
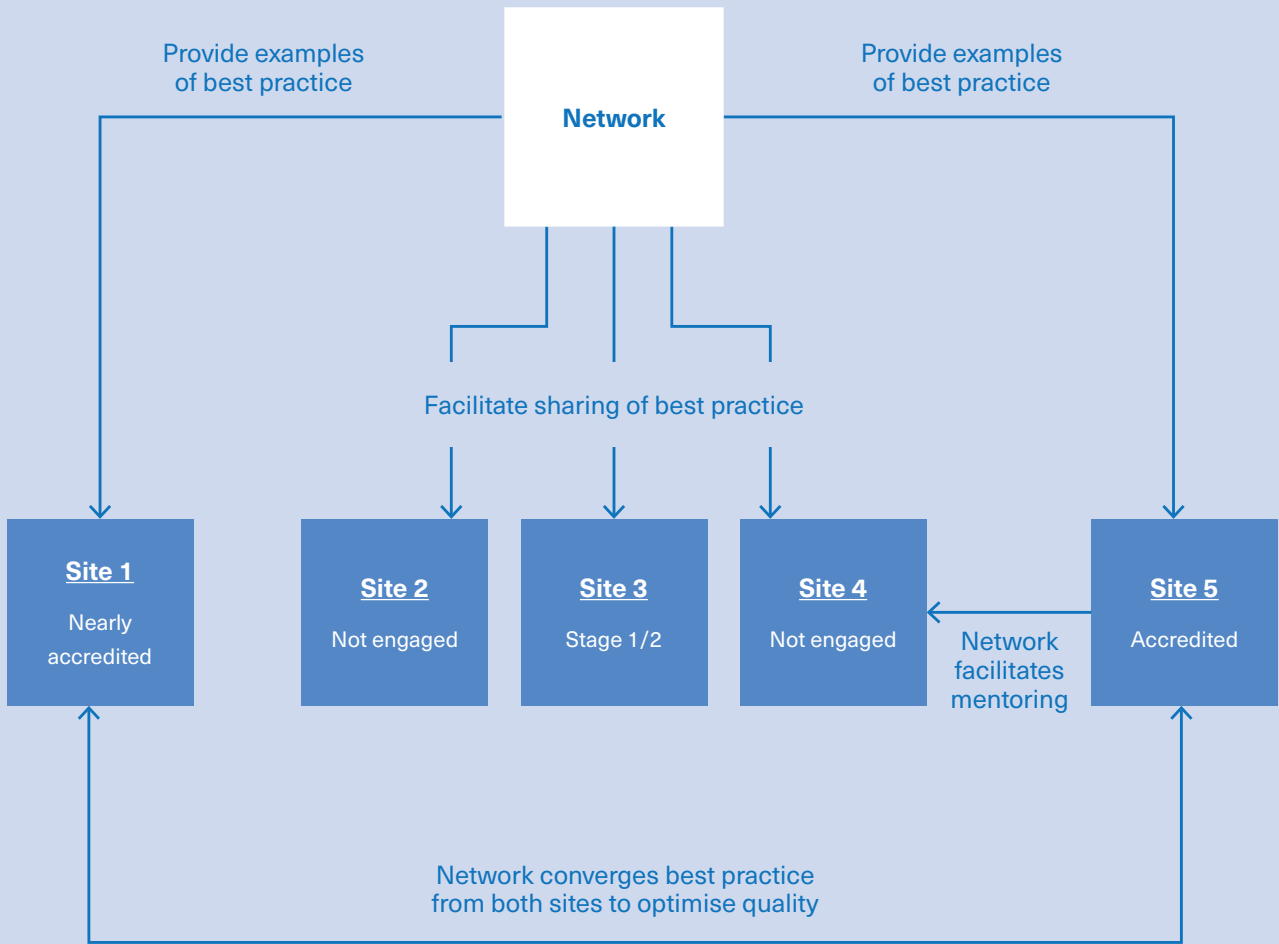
2 Top down:

Where most, if not all sites, are yet to engage with QSI. The network can provide leadership and support to sites to start their QSI journey and implement examples of best practice. They can facilitate relationships with QSI accredited sites/networks.

Provide examples
of best practice

Network

Facilitate building
relationships

Drive forward QSI

Site 1

Stage 1/2

Site 2

Not engaged

Site 3

Not engaged

3

Mixed engagement:

Some sites have engaged with QSI and are at various stages of the journey, as well as some sites yet to engage at all. The network will facilitate the sharing of best practice and identify ways to standardise care across sites. They can facilitate mentor relationships between sites to help each other progress through QSI.

QSI leads

We recommend that every site designates a QSI lead to coordinate and drive forward the work to meet the QSI. Networks may choose to appoint a supplementary QSI lead or utilise one of the existing site leads to act as a liaison between sites and coordinate work for the network standards. This will be dependent on local circumstances and available resources. However, it is important that the leads are not overburdened and that there is buy-in from all staff to facilitate quality improvement.

Definitions

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The term used continuously throughout the QSI in respect of a person attending for an imaging investigation, examination or study is 'patient'. Someone who attends with a patient to provide support is referred to as the patient's 'carer', and this term will also include a patient's representative. In some other specialties and guidance, the term 'service user' is often used to refer to a patient, but in imaging services, the term 'service user' can also be used in respect of a clinician making a referral. The terms 'patient' and 'carer' are therefore used to avoid doubt.

In these standards the term 'clinician' is used in the widest context to mean an appropriately clinically qualified person. It may therefore include radiographic and nursing staff and is not restricted to medical staff.

Quality Standard (QS)
Each standard describes the service quality required in the quality statement.

Quality statement
A required or agreed definition of quality to be achieved. A quality statement must be unambiguous, objective and measurable.

Guideline
This sets out recommendations for best practice in a particular process or application. Written by professional bodies or similar organisations of high regard, guidelines should have been peer reviewed. Guidelines are not mandatory, but they reflect the professionally agreed best practice. Clinical guidelines do not replace professional judgement and discretion.

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 2017/2018 (IR(ME)R)* the term 'protocol' has a very distinct meaning. In this QS, the term protocol is used in its non-IR(ME)R context.

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
This describes the multidisciplinary approach for patients, usually in a disease-specific care journey. Often accompanied by a visual graphic that is easy to follow, it should encompass a journey of care for a patient group. Multiple guidelines, policies and protocols may sit within one pathway of care.

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
For the purposes of this standard, the term imaging procedure is used throughout the document. This could refer to the whole process in its entirety from referral to production of report. Services should interpret the term in context with the particular quality statement and service that they deliver.
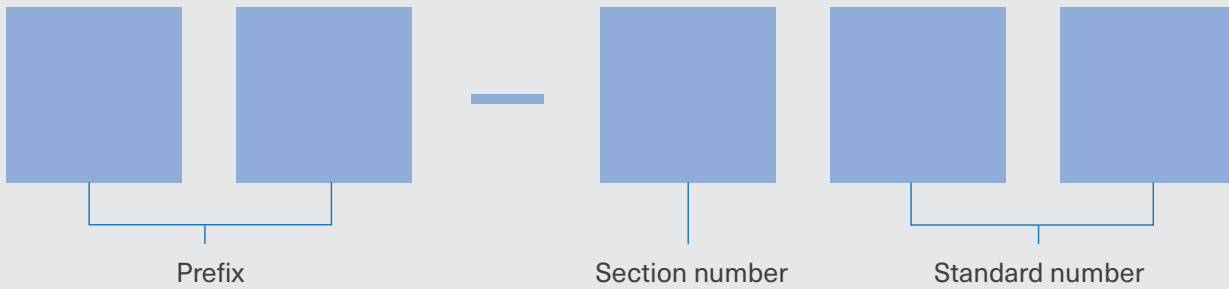
Terms of Reference (ToR)
A document which defines the purpose and structure of the network, see IN-201 for more guidance.

Structure of the Quality Standard

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Quality Standards Reference Structure

Quality standard reference numbers have the following structure:

Prefix   —   Section number   Standard number

Each standard is structured as follows:

Reference number (Ref)	This column contains a unique reference number for each quality statement and is used for all cross-referencing.
Quality standard (QS)	**Standard name** This describes how the quality statement will be known. **Quality statement** The quality statement describes the service quality required. **Outcome measure** The outcome measure describes the expected high-quality achievement. **Indicative inputs** The indicative inputs describe what a service should do to achieve the QS **Notes:** *The notes give more detail about either the interpretation or the applicability of the quality standard. The notes are prompts designed for the review team, the service and stakeholders.*

Service Letters

These quality statements use the pathway letters
IN, and the sections cover the following topics:

IN-	Imaging Network
IN-1	Involving Patients and Carers
IN-2	Workforce
IN-5	Guidelines
IN-6	Network Organisation
IN-7	Network Assurance

Imaging Network Quality Standard

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Involving Patients and Carers

Ref	Standard

IN-101	### Involving Patients and Carers
	
	Quality statement
	Patients and carers are involved in the work of the imaging network.
	
	Outcome measure
	The network can demonstrate impact as a result of patient partnerships and patient involvement.
	
	Indicative inputs
	– A network policy on patient and service partnerships should be in place.
	
	– The network should focus more on co-production than on approval.
	
	– The network should have:
	  a. Mechanisms for receiving regular feedback from patients and carers about the treatment and care they receive from all participating organisations across the network
	  b. Mechanisms for involving patients and carers in decisions about the organisation of imaging services across the network
	  c. Examples of changes made as a result of the feedback and involvement of patients and carers from across the network
	  d. Documentary evidence of patient and carer involvement at network meetings
	
	– Patients and carers should be supported by the network to ensure the opportunity and benefit of their involvement is maximised.
	
	Notes:
	1. *The arrangements for receiving feedback from patients and carers may involve surveys, focus groups or other arrangements.*
	2. *Patient and carer involvement within the network improves decision-making and enables the network to better understand population health needs and to respond to what matters most to people who need, use and care about health services.*

Workforce

Ref	Standard
IN-201	### Network Leadership

Network Leadership

Quality statement
The leadership of the network is clearly identified.

Outcome measure
The network has an organisational structure naming
the individuals who hold leadership roles.

Indicative inputs
- The network should have network lead roles which may include:
    a. Clinical radiologist lead
    b. Professional radiographer lead
    c. Lead Medical Physics Expert (MPE)/Radiation Protection Advisor (RPA)
    d. Lead manager
    e. Radiology nurse lead
    f. PACS/IT lead
    g. Commissioner

- An executive lead from the sponsoring or host organisation
  should be part of the network board.

- The network must establish terms of reference.

Notes:
1. *Network leads are not expected to be full-time roles but should have agreed job descriptions and sufficient time within their job plan for their role within the network.*

2. *Leads should be formally appointed. Transparency in appointment to network posts by the host organisation should be evident.*

3. *Terms of reference should include:*
    a. *Purpose and objectives*
    b. *Network membership*
    c. *Decision-making*
    d. *Meetings*
    e. *Responsibilities*
    f. *Delegating tasks and powers*
    g. *Reporting and monitoring*
    h. *Review by the board*

4. *The executive lead from the host organisation will play a key role in ensuring the network is part of a wider healthcare system approach.*

Workforce

Ref	Standard
IN-202	### Education and Development **Quality statement** An agreed network programme of education and development is in place. **Outcome measure** The network can demonstrate that there is a multidisciplinary education and development programme agreed by the network. **Indicative inputs** – There should be evidence of an agreed network-wide programme of multidisciplinary education and development. – The education and development programme should be reviewed annually to ensure it is consistent with the needs of the network member organisations. – Attendance lists at education and development programmes should be maintained. Attendance levels should be reviewed by the network and equity of access ensured. – Evaluation of programmes should be undertaken. **Notes:** 1. *This QS also links to Quality Standard for Imaging XR-204 and XR-704 and can be used as part of a service's compliance with these QSs.* 2. *The design and content of the programme are not subject to review, other than to ensure that the programme is consistent with the network's stated requirements and individuals' own professional development requirements.* 3. *Networks should work closely with imaging academies to provide training where appropriate.*

Workforce

Ref	Standard

IN-203	### Workforce Strategy
	
	Quality statement
	An agreed network workforce strategy is in place.
	
	Outcome measure
	The network can demonstrate that there is an agreed network workforce strategy (linked to the demand and capacity plan (IN-602)) which is evaluated regularly.
	
	Indicative inputs
	– The workforce strategy should be clearly described.
	
	– The strategy should be developed with all members of the network.
	
	– The strategy should address as a minimum:
	   a. Recruitment, retention and demand requirements
	   b. Development of extended roles
	   c. Options for implementing flexible working arrangements between different providers organisations in the network
	
	– The strategy should consider place of work, including remote or homeworking if relevant, and include access to workstations and technology.
	
	– Network meeting minutes/notes should be distributed to members of the network.
	
	– There should be an action plan for delivery of the strategy, including timeframes for completion. The action plan should include progress on deliverables and be reviewed regularly.
	
	– Workforce plans should demonstrate a link to education and training providers, such as imaging academies, where appropriate.
	
	Notes:
	1. *Future plans should consider the likely requirements for a five-year period.*
	
	2. *The workforce action plan should demonstrate progress made. The existence of an action plan without progression is not sufficient to meet this QS.*
	
	3. *www.england.nhs.uk/wp-content/uploads/2022/04/B0418_Diagnostic-imaging-network-workforce-guidance_April-2022.pdf*

Guidelines

Ref	Standard

IN-501	### Network-wide Clinical Guidelines
	
	Quality statement
	Agreed network clinical guidelines are in place.
	
	Outcome measure
	Guidelines covering a range of common pathways or processes are agreed for use in services across the network.
	
	Indicative inputs
	– Network clinical guidelines should include but not be limited to:
	    a. Referral management
	    b. Common referral pathways
	    c. Image optimisation
	    d. Image reporting
	    e. Access to specialised services
	    f. Community diagnostic centres
	    g. Ionising and non-ionising radiation safety
	
	– There should be evidence of network meeting minutes, showing that guidelines have been agreed, reviewed and distributed.
	
	– The agreed network guidelines should be audited to demonstrate compliance (QS IN-702).
	
	Notes:
	1. *Guidelines/protocols should be based on national guidance and the commissioned local pathways. Implementation of these guidelines at local level is covered in the QSI 2021 (QS XR-501 to XR-519 and the Modality Standards).*
	
	2. *The development of guidance and protocols agreed across the network reduces variation in practice and supports system information sharing.*

Network Organisation

Ref	Standard
IN-601	### Network Organisation **Quality statement** The network has defined governance arrangements in place. **Outcome measure** An imaging network is in place with defined governance arrangements to ensure network business can be addressed. **Indicative inputs** – An imaging network (see note 1) consisting of representatives from imaging services, commissioners and other key stakeholders should meet regularly to discuss latest national guidance, opportunities for joint working locally, service provision and learning. – A clear accountability framework and risk management mechanism, including meeting structure, should be in place for reporting at network executive level. – There should be agreed hosting arrangements for the network. – The network should have an annually agreed programme of work. – Terms of reference (ToR) for the network board and subgroups should be agreed, including the quorum for meetings agreed by the network membership. – There should be arrangements for liaising with local care systems. – There should be arrangements for liaising with disease-specific clinical networks locally and regionally. – There should be evidence of meeting agendas and notes, and distribution arrangements. **Notes:** 1. *A network is made up of the network board and delegated groups responsible to the network board.* 2. *The network ToR should outline how meetings are hosted and how often meetings are held, but the frequency of meetings is less important than the quality of discussion.* 3. *All imaging services within the network area, whether they are NHS or independent sector providers and regardless of the size of the service, should be included (or at least invited to participate).* 4. *It is encouraged that a patient or lay person is included in the governance structure.* 5. *NHS England guidance for commercial structure and operational governance: www.england.nhs.uk/publication/diagnostic-imaging-network-commercial-structure-and-operational-governance-guide/*

Network Organisation

Ref	Standard
IN-602	### Network Demand and Capacity Evaluation **Quality statement** There is formal capacity and demand modelling for services across the network. **Outcome measure** There is an agreed capacity and demand plan which is evaluated regularly at network meetings. **Indicative inputs** – There should be an agreed plan that identifies the current and future demand and capacity for services across the network, including diagnostic centres, where appropriate. – The capacity and demand plan should include details of equipment and workforce requirements across the network. – Notes from network meetings, where these plans are discussed, should be shared with network members. – The network should have assessed its informatics capability to inform the evaluation, and ensure it has access to individuals or a team with the appropriate competences. (See note 3) – Plans should consider both the requirements and the impact on delivery models across the network. – Plans should demonstrate a link to workforce plans (QS IN-203). – Patients should be an integral part of developing capacity and demand plans, especially with regards to future requirements (QS IN-101). – Plans should consider referral pathways for rarer or complex pathways. **Notes:** 1. *The evaluation schedule should be determined in the ToR.* 2. *Demand and capacity should be determined using a recognised model such as NHS England: www.england.nhs.uk/ourwork/demand-and-capacity/models/ and tool kit: www.england.nhs.uk/ourwork/demand-and-capacity/models/diagnostic-imaging-capacity-and-demand-tool/* 3. *Capacity and demand plans should be more than the sum of current activity and should consider the likely requirements for a five-year period.* 4. *Appropriate competences may be achieved by bringing together individuals from more than one provider organisation.*

Network Organisation

Ref	Standard
IN-603	### Service Development and Improvement Plan **Quality statement** There is a five-year development and improvement plan in place. **Outcome measure** The network is able to demonstrate improvements in service provision over the five years. **Indicative inputs** – The network should be able to demonstrate an agreed development and improvement plan that sets out its programme. – The network should be able to demonstrate how the five-year plan aligns with the network provider organisations' long-term delivery plans. – The service development and improvement plan should be aligned to the workforce and capacity and demand plans (QS IN-203 and IN-602).
	Notes: 1. *Reviewers should ask about the process of developing this plan.* 2. *Reviewers should ask about the engagement of patients and their carers in the development of the plan (QS IN-101).* 3. *Reference QSI 2021 five-year plan XR-605.*

Network Assurance

Ref	Standard

IN-701	### Network Review and Learning
	
	Quality statement
	Network review and learning arrangements are in place.
	
	Outcome measure
	The network can demonstrate changes made as a result of review and learning.
	
	Indicative inputs
	– Review and learning should involve all the professional disciplines associated with imaging.
	
	– Improvements made or changes to services as a result of shared learning should be clearly communicated to all provider organisations.
	
	– Representatives of providers within the network should meet at least once a year to:
	  a. Identify any changes needed to network-wide policies, procedures and guidelines (QS IN-501)
	  b. Review results of audits undertaken and agree action plans (QS IN-702)
	  c. Review and agree learning from positive feedback, complaints, critical incidents and 'near misses'
	  d. Share good practice and potential service improvements
	
	– The network should be able to demonstrate a clear process for review of these measures.
	
	– There should be a link to other service improvement analysis, feedback and information.
	
	Notes:
	1. *The aim of this QS is to drive up quality across the network.*
	
	2. *Networks may communicate the review and learning outcomes in a variety of formats such as but not limited to newsletters, ezines, posters and websites.*
	
	3. *Reviewers will want to ensure the learning and review sessions are multidisciplinary/multi-professional.*
	
	4. *It is encouraged that patients and/or lay representatives input into the network review and learning process.*
	
	5. *Network review and learning meetings should address areas in which collaboration between provider organisation is necessary.*

Network Assurance

Ref	Standard
IN-702	### Network Audit

Quality statement
A defined rolling programme of audit as appropriate for the network is in place.

Outcome measure
The network can demonstrate improvements in care and outcomes as a result of ongoing audit.

Indicative inputs
– The rolling programme should ensure that action plans are developed following audits and that their implementation is monitored.

– Results of the network audit programme should be shared with the providers and stakeholders within the network.

Notes:
1. *Reviewers should enquire about the multidisciplinary nature of audit programmes.*

2. *Audits should relate to the guidelines in QS IN-501.*

3. *Reviewers should test whether staff who do not attend audit presentations can access the results and learning from audit meetings.*

4. *A selection of recommended clinical audits is given at www.rcr.ac.uk/clinical-radiology/audit-and-qi/auditlive*

5. *The audit programme will depend on the maturity and responsibility of the network.* |

Network Assurance

Ref	Standard

IN-703	### Network Research
	
	Quality statement
	A portfolio of clinical trials and research activities is held by the network.
	
	Outcome measure
	The network has an agreed research strategy that identifies how shared or joint research programmes can be implemented.
	
	Indicative inputs
	– The network should have a list of applicable trials and research programmes.
	
	– The research portfolio should have considered:
	  a. common research themes across the network (and should be more than the sum of all the providers' research programmes)
	  b. the use of artificial intelligence (AI) in clinical settings
	
	– There should be evidence that new research opportunities, as well as ongoing research programmes, are discussed and communicated to network members.
	
	– A record of network research meetings, where plans have been discussed, should be shared with network providers.
	
	– The network should be able to demonstrate a multidisciplinary approach to research and clinical trials.
	
	– The network should consider how the patient and carer input into the network (QS IN-101) also contributes to the research strategy.
	
	Notes:
	1. *The quality or type of research is not subject to review, other than the requirements that it is designed to answer important clinical question(s) and involves more than one network member organisation.*
	
	2. *The network should encourage research in its wider sense in all its provider organisations.*
	
	3. *Confidentiality and GDPR should be adhered to.*

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.
BI	Background information to review team.
Carer	Throughout the Quality Standards, the term 'carer' applies to both family carers and paid carers or support workers.
CCG	Clinical Commissioning Group.
Commissioner	A commissioner decides how NHS and/or social care resources are spent, with the aim of improving health, reducing inequalities and enhancing patient experience.
CNR	Case note review or clinical observation.
CQC	The Care Quality Commission is the independent regulator of health and social care in England.
DH	Department of Health.
Doc	Documentation should be available. Documentation may be in the form of a website or other electronic format.
GP	A GP is a medical doctor, sometimes called a family doctor. They are usually the first person patients see for their healthcare, and they help patients to access other services.
HealthWatch	The 'consumer champion' for both health and adult social care in England and an independent, influential and effective local voice of the public on health issues.
MP&S	Meeting patients, carers and staff.
Network	A group of organisations working together, 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.
Provider	A health or social care organisation which provides services to patients.
QRS	Quality Review Service.
QS	Quality Standard.

Find out more

For more information,
please email qsi@rcr.ac.uk
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QSIN
QUALITY STANDARD FOR IMAGING NETWORKS

CoR
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RCR
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