

# Principles of Safe Staffing for Radiography Leaders

**Second edition April 2019** 

Review Date: April 2021

ISBN: 978-1-909802-39-1

Quartz House 207 Providence Square Mill Street London SE1 2EW

020 7740 7200 info@sor.org

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#### 1. Summary

The Society and College of Radiographers issues this updated guidance on principles of safe staffing for radiography leaders. This replaces the first published document of May 2015

This document aims to provide principles which should be considered when reviewing staffing models for clinical imaging or radiotherapy/oncology services. It outlines the legal considerations that must be taken into account, members' professional obligations and the principles contained in the **Imaging Services Accreditation Scheme Standard**, hereafter referred to as the Imaging Standard and includes key reference texts and resources. It does not recommend a formulaic approach to staffing or a ratio of patients to staff as it is felt this type of 'one size fits all' approach is not appropriate for the work members do, and staffing figures determined using this approach could too easily be adopted as the norm, rather than the minimum.

Full details of resources embedded throughout this document can be found in the references section.

#### 2. Introduction

This document aims to provide principles which should be considered when reviewing staffing models for clinical imaging or radiotherapy/oncology services. It includes key reference texts (but these are not exhaustive) and the principles contained in the *Imaging Standard*.

Although the Imaging Standard is aimed at services providing imaging, many of the principles within the domains could apply to radiotherapy services.

The Imaging Standard can be viewed here

Staffing levels are dependent on multiple factors: the skills mix across the patient pathway, number and complexity of equipment, number and type (condition) of patients, types of procedures and activities, number of students or trainees, and the opening/operational hours of a service.

There is not a simple formula that can be applied to calculate staffing levels, but the factors detailed within this document should be considered by managers, to assist in determining the correct staffing for their service. The principles outlined in this guidance apply equally to both out of hours and routine service provisions. The Imaging Standard covers staffing levels within the 'Leadership and Management Domain, LM1'. Details can be found in the associated commentaries document LM1 – Roles, responsibilities, authorities and interrelationships.

All staffing in clinical imaging and radiotherapy facilities should be configured in teams, with the appropriate mix of assistant practitioners, practitioners, advanced clinical practitioners, consultant clinical practitioners, sonographers, radiologists/clinical oncologists, medical physicists and technical personnel, and nursing staff, to support the specific needs of the patient pathways within the service. In addition, appropriately trained support personnel will be required within a team to ensure effective and efficient delivery of the clinical imaging or radiotherapy/oncology service, e.g. administrative support.

Additional staffing is required in both clinical imaging and radiotherapy/ oncology services to underpin service delivery supporting activities e.g. administration, auditing, quality assurance and quality improvement initiatives, management, continuing education for staff, and student education. This includes practice educators; clinical staff offering didactic teaching and support for clinical training programs. Staffing to support service development and research must also be considered and capacity for these activities included within the overall team.

It is also important to enable activities for regulatory requirements such as the role of the radiation protection supervisor (RPS), who must be allowed specific time to carry out their duties.

Rapid changes in technology result in the requirement for team members to contribute to a highly dynamic process in which techniques are introduced and refined continuously. Thus, staffing levels across teams must take account of the requirement for time to learn and undertake formal (and less formal) education to meet these specific needs. A College of Radiographers' accredited practice educator(s) is recommended within services to support learning for all clinical imaging and radiotherapy staff and students. Details of the College of Radiographers' Practice Educator Accreditation Scheme can be found here.

Policy and guidance documents issued by the Society and College of Radiographers are available from the Society and College of Radiographers policy and guidance document library

#### 3. Principles of safe staffing

There are some fundamental areas to be considered when determining the correct staffing level for a service. Workforce profiles required in all services will be dependent upon a mixture of legal requirements, operational requirements and other factors, including:

#### 3.1 The legal requirements

Legal obligations must be complied with. Where legislation is breached, members responsible could find themselves personally accountable for the breach and their employer may face criminal proceedings and financial penalties. Where contracts of employment are breached members will be able to seek redress through the employer's grievance procedure and, in some circumstances, through application for an employment tribunal.

Managers must therefore be mindful of the legal and contractual obligations that employers have to their staff. Staffing levels should be set to ensure that individual contracts of employment, which set out the hour's people work and their place of work are complied with as is the **Working Time Regulations 1998**, which limits (through legislation) the number of hours people can work over a given time period, and stipulates the maximum hours of work before a break is required.

It is important, however, to recognise that the *Working Time Regulations* are designed to protect patients as much as employees. It is also important to recognise that as the factors detailed in this guidance document change, for example operational hours, that staffing levels must then be reviewed to ensure they reflect the changing demands on the service.

#### Current relevant laws to consider are included in the following table:

Note: this is not an exhaustive list

lonising radiation regulations	The Ionising Radiation (Medical Exposure) Regulations 2017 The Ionising Radiation (Medical Exposure) Regulations (Northern Ireland) 2017 The Ionising Radiation (Medical Exposure) (Amendment) Regulations 2018
Contractual agreements	Contracts of employment Working Time Regulations 1998 Maximum weekly working hours
Work equipment regulations	Provision and Use of Work Equipment Regulations (1998)
Codes of conduct	Code of Conduct for NHS Managers (2002)
Health and safety regulations	The Management of Health and Safety at Work Regulations 1999 The Management of Health and Safety at Work Regulations 1999 Approved Code of Practice & guidance The Health and Safety at Work Act 1974

#### 3.1.2 Regulatory bodies in healthcare

Care Quality Commission England Healthcare Improvement Scotland Healthcare Inspectorate Wales

The Regulation and Quality Improvement Authority Northern Ireland

#### 3.1.3 Useful websites

NHS Employers: <a href="https://www.nhsemployers.org/">https://www.nhsemployers.org/</a>

## 4. The Royal College of Radiologists and the College of Radiographers: The Imaging Standard1

The Imaging Standard can be viewed in full here and provides the following information to support safe staffing:

The Imaging Standard requires evidence of the recruitment process to ensure staff competency and training for the role being undertaken.

The Imaging Standard requires evidence of ongoing staff competency and training defining support mechanisms to ensure staff maintain competency and develop new competencies.

The above statements have been summarised from criteria set out in the 'Facilities, Resources and Workforce Domain, FR4', and detail can be found in the associated commentaries document FR 4 – The service implements and monitors systems to ensure staff are competent to deliver the service.

The Imaging Standard expects there to be evidence of workforce planning, review and development, including working with Institutes of Higher Education to ensure sufficient staffing numbers.

The statement above has been summarised from criteria set out in the 'Facilities, Resources and Workforce Domain, FR5', and detail can be found in the associated commentaries document FR5 – The service implements and monitors systems to engage in service and workforce review, planning and development

#### 5. Operational Matters

#### **5.1 Calculating safe staffing levels**

When reviewing staffing models for clinical imaging or radiotherapy/oncology services, the following subsets will help in calculating safe staffing levels. It will be important to remember when calculating to take into account service delivery hours, e.g. 12 hour extended day and 24/7 emergency care. When looking at the subsets it may be useful to keep in mind the various scenarios that are common to many services:

- Calculating safe staffing levels for any service review.
- Calculating safe staffing numbers and therefore costs for waiting time initiatives.
- Calculating safe staffing levels for new initiatives or service developments.
- Calculating safe staffing levels for business cases requiring increased diagnostic/therapeutic input.
- Calculating safe staffing levels for research initiatives.
- Calculating the 'tipping point' of safe staffing levels where an increase may be needed, due to several small initiatives having been absorbed into the service.

It is important to remember to include annual leave, study leave and sick leave in any calculation. For example, it may be that a service works with an average of 42 working weeks per year, at 40 hours per week for consultant radiologists, and 44 working weeks per year at 37.5 hours per week for qualified radiographers (this may be amended according to local circumstances).

### 5.2 Staffing to account for annual leave and levels of sickness (in line with individual service averages)

The Imaging Standard requires that there be "systems in place to ensure an appropriate complement of staff to deliver identified tasks". This requirement can be found in the 'Leadership and Management Domain', LM1 (LM1C5), and further details can be found in the associated commentaries document LM1 – Roles, responsibilities, authorities and interrelationships.

#### 5.3 Team leadership and across-team skills mix

The table below provides details of Imaging Standard criteria relating to team leadership and skills mix across a team. Key publications relating to these criteria are also signposted.

Imaging Standard criteria	Details
LM1C3 and LM1C4 (Leadership and Management Domain)	"Defined roles, responsibilities and interrelationships for each service delivery area/modality, as appropriate"
	"Systems in place to ensure clear definition and management of tasks for staff to deliver the service"
	Associated commentaries document LM1 – Roles, responsibilities, authorities and interrelationships
FR5C3 (Facilities Resources and Workforce Domain)	"Systems in place to assess, agree and implement workforce development initiatives to include appropriate skill mix"
	Associated commentaries document FR5 – The service implements and monitors systems to engage in service and workforce review, planning and development

Publication	Details
Achieving World-Class Cancer Outcomes: The Vision for Therapeutic Radiography (SCoR, 2016)	Access the online document here
Implementing the career framework in radiotherapy - policy into practice (SCoR, 2009)	Access the online document here
The radiography workforce Current Challenges and Changing Needs (CoR, 2009)	Access the online document here
Team working in Clinical Imaging (RCR & CoR, 2012)	Access the online document here

#### **5.4 Workforce planning**

The table below provides details of Imaging Standard criteria relating to the labour market, available expertise and skills, and workforce planning. Helpful websites providing various resources and tools for workforce planning are also listed.

Imaging Standard criteria	Details
FR4C1 – FR4C3 inclusive (Facilities Resources and Workforce Domain)	"Systems in place to support the recruitment of staff" "Systems in place to ensure that all staff are competent to undertake the role(s) to which they have been appointed, including relevant employment checks" "Systems in place to check qualification and current registration of relevant staff"
	Associated commentaries document FR4 – The service implements and monitors systems to ensure staff are competent to deliver the service
FR5C5 and FR5C6 (Facilities Resources and Workforce Domain)	"Systems in place to support engagement with content and delivery of relevant education and training"  "Systems in place to support and monitor staff retention and ensure succession planning arrangements"  Associated commentaries document FR5 – The service implements and monitors systems to engage in service and workforce review, planning and development

Website	Details
Skills for Health	Six Steps methodology to Integrated Workforce Planning
NHS Improvement	Workforce planning and development

#### 5.5 Operational hours

The table below provides details of Imaging Standard criteria relating to operational hours. Key resources relating to these criteria are also signposted.

Imaging Standard criteria	Details
LM1C10 (Leadership and Management Domain)	"Systems in place to support staff in managing stress and achieving a work/life balance"
	Associated commentaries document <u>LM1</u> <u>- Roles, responsibilities, authorities and interrelationships</u>
FR5C4 (Facilities Resources and Workforce Domain)	"Systems in place to manage any and all out-of- hours service provision"
	Associated commentaries document FR5 – The service implements and monitors systems to engage in service and workforce review, planning and development

Resource	Details
The Working Time Regulations 1998	Access the legislation here
Gov.UK website	Maximum weekly working hours
Guidance on Out of Hours Working and your Personal Scope of Practice (SCoR, 2013)	Access the online document here

#### **5.6 Sources for national standards**

The table below provides details of Imaging Standard criteria relating to national standards. Key resources relating to national standards are also listed.

Imaging Standard criteria	Details
FR4C2 – FR4C5 inclusive, and FR4C7 (Facilities Resources and Workforce Domain)	"Systems in place to ensure that all staff are competent to undertake the role(s) to which they have been appointed, including relevant employment checks"
	"Systems in place to check qualification and current registration of relevant staff"
	"Systems in place to ensure that all staff are properly inducted into their roles, together with any additional education and training provided as necessary"
	"Systems in place to ensure that any staff in a training position are adequately supervised"
	"Systems in place to ensure that all staff are supported to maintain necessary skills, knowledge and levels of competence, and to develop new competencies"
	Associated commentaries document (including all references) FR4 – The service implements and monitors systems to ensure staff are competent to deliver the service

Resource	Details
RCR, SCoR & IPEM	UK Radiotherapy Board
RCR, SCoR & IPEM	Clinical Imaging Board
HCPC	The standards of proficiency for radiographers (2013)

#### **5.7 Equipment**

Imaging Standard criteria relating to equipment age, technical ability and infrastructure are covered by the 'Facilities, Resources and Workforce Domain', specifically by FR2 and FR3. Relevant commentaries are also available for each section (including all references): FR2 – The service implements and monitors systems for the procurement of equipment to deliver the service and FR3 – The service implements and monitors systems to install and maintain equipment to deliver the service

Key publications relating to equipment are detailed in the table below.

Publication	Details
Managing high value capital equipment in the NHS in England (National Audit Office, 2011)	Access the online document here
Magnetic Resonance Imaging (MRI) Equipment, Operations and Planning in the NHS (RCR, SCoR & IPEM; 2017)	Access the online document here
CT Equipment, Operations, Capacity and Planning in the NHS (RCR, SCoR & IPEM; 2015)	Access the online document here

#### 5.8 Types of procedures/treatments within a centre

Imaging Standard criteria relating to types of procedures or treatments within a centre are covered by the 'Clinical Domain'. Relevant commentaries are also available for each section (including all references): CL1; CL2; CL3; CL4; CL5; CL6; CL7; and CL8

#### 5.9 Ongoing requirements for CPD, education and training

Imaging Standard criteria relating to continuing professional development, education and training are detailed in the table below. Key publications for this topic have also been listed.

Imaging Standard criteria	Details
LM1C6 (Leadership and Management Domain)	"Systems in place to ensure agreed appraisals and/or personal development reviews are conducted for all staff"
	Associated commentaries document  LM1 – Roles, responsibilities, authorities and interrelationships
FR4C7 (Facilities Resources and Workforce Domain)	"Systems in place to ensure that all staff are supported to maintain necessary skills, knowledge and levels of competence, and to develop new competencies"
	Associated commentaries document (including all references) FR4 – The service implements and monitors systems to ensure staff are competent to deliver the service

Publication	Details
Continuing Professional Development: Professional and Regulatory Requirements (SCoR, 2008)	Access the online document here
Principles for continuing professional development and lifelong learning in health and social care (The Inter professional CPD and Lifelong Learning UK Working Group, 2019)	Access the online document here
Education and Career Framework for the Radiography Workforce (SCoR, 2013)	Access the online document here

#### 5.10 Service development

Imaging Standard criteria relating to service development, including research and audits of practice are covered by the 'Leadership and Management Domain', specifically section LM2 (Quality Management System) and section CL8 of the 'Clinical Domain', specifically CL8C1 – CL8C3 and CL8C5. Relevant commentaries are available for each section (including all references): LM2 and CL8

Imaging Standard criteria specifically relating to safety in Magnetic Resonance Imaging is covered by section SA3 of the 'Safety Domain'. Relevant commentaries are available for each section (including all references):

SA3 – The service implements and monitors systems to manage risks associated with magnetic resonance imaging

In addition, the following publications are relevant to research, and safety in Magnetic Resonance Imaging.

Publication	Details
The Society and College of Radiographers Research Strategy 2016- 2021 (SCoR, 2015)	Access the online document here
Safety in Magnetic Resonance Imaging (SCoR & BAMMR, 2019)	Access the online document here

#### 6. Professional Obligations

The HCPC Standards of conduct, performance and ethics set out the duties required of all registrants and must be complied with at all times. Staffing levels must be set to ensure there is no compromise of these requirements.

The HCPC also sets **Standards of proficiency for radiographers** and **Standards for continuing professional development**. Staffing levels must allow all radiographers to continue to practice at the level of proficiency set out in these standards and to allow for the process of continuing professional development.

#### 6.1 The Society and College of Radiographers guidance

The following guidance concerning professional obligations has been published by SCoR.

Publication	Details
Code of Professional Conduct (2013)	Access the online document here
Guidelines for Professional Ultrasound Practice (2015, updated 2019)	Access the online document here
Raising concerns in the workplace: guidance for SoR members (2015)	Access the online document here

#### 7. Other factors

Other factors that should be considered and further resources for evaluating safe staffing levels are listed below.

- Geographical location/formal links to other clinical sites
- Case mix
- IT infrastructure within a centre and links across networks streamlining practice
- The extent of network-wide protocol standardisation, governance arrangements and staff cover arrangements
- Processes in place to allow for raising concerns for all staff members regarding safe staffing levels
- Imaging Standard requirements for safe staffing, not included above.
   Relevant commentaries are available for each section (including all references): SA1, SA2, SA3, SA4, SA5, SA6, SA7
- BS EN ISO 9001:2008 quality standard for radiotherapy. This international standard provides the requirements for a quality management system, which is a framework used by organisations to control processes and achieve objectives such as customer satisfaction, regulatory compliance and continual improvement.
- NHS England service specifications
- SCoR guidance Ultrasound examination times and appointments (2015)
- Lone working arrangements
  - o Working alone HSE (2013)
  - o Lone workers NHS Employers website

#### 8. Conclusion

It is recognised that in the current climate achieving optimal staffing levels is challenging. Nevertheless employers must ensure legal obligations are complied with. Individuals must also ensure they comply with HCPC Standards outlined in section 6, above.

It is also very important to take into account issues such as sick leave averages, ongoing CPD requirements, skills mix, staff demographics and equipment age. Although unlikely in themselves to lead to legal action, should appropriate allowance not be made, failure to take proper account of these factors will potentially lead to unsustainable staffing levels, which in turn will increase the likelihood of failure to adhere to legal obligations. Services must also consider the resources required to ensure that a quality service is provided, and that quality improvement initiatives and service developments are integral factors when planning staffing levels.

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First edition published as Principles of safe staffing for radiography leaders in 2015

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