

The Society and College of Radiographers

Principles of safe staffing for radiography leaders

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. All policy and guidance documents issued by the Society and College of Radiographers are available from the website at <https://www.sor.org/learning/document-library>

Staffing levels are dependent on the skills mix across the patient pathway, the number and complexity of equipment, the number and types (condition) of patients, the types of procedures and activities and the number of students or trainees and the opening/operational hours of a service. There is not a simple formula that can be applied but the factors below should be considered to assist managers in determining the correct staffing for their department. The principles outlined in this guidance apply equally to both out of hours and routine service provision.

All staffing in clinical imaging and radiotherapy facilities should be configured in teams with the appropriate mix of radiographers/ultrasonographers, 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 the 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 supporting service delivery activities e.g. administration, auditing, management, continuing education for staff, and student education. This includes clinical staff to offer didactic teaching and to support clinical training programs. Staffing to support service development and research must also be considered and capacity for these activities included within the overall team.

Rapid changes in technology result in the requirement for the team members to be able to contribute to a highly dynamic process in which techniques are introduced and refined continuously, and thus staffing levels across the team must take account of the requirement for time for staff to learn and undertake formal and less formal education to meet the 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 (1).

Managers need to be mindful of the legal and contractual obligations that employers have to their staff. Staffing levels should therefore be set to ensure that individual contracts of employment which set out the hours people work and their place of work are complied with as is the European Working Time Directive (EWTD) which limits through legislation the hours people can work and the maximum hours of work before a break is required.

It is important to recognise that the EWTD is legislation designed to protect patients as much as employees. It is important also to recognise that as the factors below change, for example operational hours then staffing levels must be reviewed to ensure they reflect the changed demands on the service.

Workforce profiles required in all services will be dependent upon a mixture of legal requirements and operational and other factors, including:

1. Legal requirements

- 1.1.1 Medical exposure legislation
 - [The Ionising Radiation \(Medical Exposure\) Regulations 2017](#) (2)
 - [The Ionising Radiation \(Medical Exposure\) Regulations \(Northern Ireland\) 2018](#) (2)
 - [The Ionising Radiation \(Medical Exposure\) \(Amendment\) Regulations 2018](#) (2)
- 1.1.2 [The Ionising Radiations Regulations 2017](#) (3)
 - [The Ionising Radiations Regulations \(Northern Ireland\) 2017](#) (3)
- 1.1 The honouring in full of [contracts of employment](#) (4)
- 1.2 Compliance with The European Working Time Directive, 2009
 - 1.2.2 [NHS Employers](#) (5)
 - 1.2.3 [Gov.uk](#) (6)
- 1.3 [Provision and Use of Work Equipment Regulations, 1998](#) (7)
- 1.4 [Management of Health, Safety and Work Regulations, 1999](#) (8 a,b)
- 1.5 Compliance with [The Health and safety at Work Act,1974](#) (9)

2. Operational matters

- 2.1 Staffing to account for annual leave and levels of sickness in line with individual Trust/Board averages
- 2.2 Team leadership, and skills mix across the team (10 a, b, c, d)
- 2.3 Labour market - [available expertise and skills](#) (11)
- 2.4 Operational hours
 - 2.4.1 [Working time regulations](#) (6)
 - 2.4.2 [SoR guidelines](#)(12)
- 2.5 Sources for National standards
 - 2.5.1 [Radiotherapy board](#) (13)
 - 2.5.2 [Clinical Imaging Board](#) (14)
 - 2.5.3 [HCPC Standards of Proficiency – Radiographers, 2013](#) (15)

- 2.6 Equipment age and technical ability and infrastructure
 - 2.6.1 [All capital equipment](#) (16)
 - 2.6.2 [radiotherapy](#) (17)
- 2.7 Types of procedures/treatments within a centre
- 2.8 Ongoing requirements for CPD /education and training
 - 2.8.1 Society and College of Radiographers [Continuing Professional Development: Professional and Regulatory Requirements](#), London: SCoR, 2008 (18)
 - 2.8.2 Society and College of Radiographers [Education and career framework for the radiography workforce](#) London: SCoR, 2013 (19)
- 2.9 Service development - Audits of practice and research
 - 2.9.1 [Research and the radiography profession: A strategy for research 2010 - 2015](#) London: SCoR, 2010 (20)
- 2.10 [SCoR guidance for MRI units](#) (21)
- 3. Other factors**
 - 3.1 Geographical location/ formal links to other clinical sites
 - 3.2 Case mix
 - 3.3 IT infrastructure within the centre and links across networks- streamlining practice
 - 3.4 The extent of network-wide protocol standardisation, governance arrangements and staff cover arrangements
 - 3.5 Quality Standards such as [Imaging Services Accreditation Scheme](#) (22) (ISAS) in Clinical Imaging and Quality systems in Radiotherapy - implementation and ongoing commitment
 - 3.6 Other SCoR guidance including [Ultrasound examination times](#) (23)
 - 3.7 Lone working arrangements
 - 3.7.1 [HSE working alone](#) (24)
 - 3.7.2 Society and College of Radiographers [Violence and Aggression at work](#) (25)

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 an application to an Employment Tribunal.

It is also very important to take into account issues such as sick leave averages, the ongoing CPD requirement, 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.

FURTHER READING

Society of Radiographers National Cancer Action Team Image Guided Radiotherapy (IGRT) Clinical Support Programme in England 2012 -2013 London:SCoR, 2013

<http://www.sor.org/learning/document-library/image-guided-radiotherapy-igrt-clinical-support-programme-england-2012-2013>

National Radiotherapy Implementation Group Report Image Guided Radiotherapy – Guidance for implementation and use, 2012

Royal College of Radiologists Towards Safer Radiotherapy London: RCR, 2008

<https://www.ipem.ac.uk/Portals/0/Images/Towards%20Safer%20Radiotherapy.pdf>

SCoR/IPEM/RCR On Target - Ensuring Geometric Accuracy London: 2008

https://www.sor.org/system/files/document-library/members/On_target_final.pdf

Society and College of Radiographers The joint response of the Society of Radiographers and the College of Radiographers to the Final Report of the Independent Inquiry into care provided by Mid Staffordshire NHS Foundation Trust London: SCoR, 2013

<https://www.sor.org/learning/document-library/joint-response-society-radiographers-and-college-radiographers-final-report-independent-inquiry-care>

(All links accessed 3/4/15)

Bibliography

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<http://www.sor.org/career-progression/practice-educators>

- (2) The Ionising Radiation (Medical Exposures) Regulations 2017
<http://www.legislation.gov.uk/uksi/2017/1322/contents/made>

The Ionising Radiation (Medical Exposures) Regulations (Northern Ireland) 2018
<http://www.legislation.gov.uk/nisr/2018/17/contents/made>

The Ionising Radiation (Medical Exposure) (Amendment) Regulations 2018
<http://www.legislation.gov.uk/uksi/2018/121/regulation/2/made>

The Ionising Radiations Regulations 2017
<http://www.legislation.gov.uk/uksi/2017/1075/contents/made>

The Ionising Radiations Regulations (Northern Ireland) 2017
<http://www.legislation.gov.uk/nisr/2017/229/made>

IR(ME)R 2000 and IR(ME) Amendment Regulations 2006 & 2011
<https://www.sor.org/learning/document-library/irmer-2000-and-irme-amendment-regulations-2006-2011>

- (3) The Ionising Radiation Regulations 1999
<http://www.legislation.gov.uk/uksi/1999/3232/contents/made>
The Ionising Radiations Regulations 1999 (IRR'99): Guidance Booklet
<https://www.sor.org/learning/document-library/ionising-radiations-regulations-1999-irr99-guidance-booklet-0>

- (4) Gov.uk Employment Contracts Overview
<https://www.gov.uk/employment-contracts-and-conditions/overview>
- (5) NHS Employers Working Time Directive Update
<http://www.nhsemployers.org/~media/Employers/Documents/SiteCollectionDocuments/Paper%202-1%20EWTD.pdf>
- (6) Gov.uk Working Hours
<https://www.gov.uk/maximum-weekly-working-hours>
- (7) Provision and use of work equipment regulations 1998 <http://www.hse.gov.uk/work-equipment-machinery/puwer.htm>
- (8) Health and safety Executive
 - a. The management of Health and Safety at work regulations 1999
<http://www.legislation.gov.uk/uksi/1999/3242/contents/made>
http://www.hseni.gov.uk/l21_management_of_health_and_safety_at_work.pdf
 - b. Health and Safety Executive Management of Health and Safety at Work. Management of Health and Safety at Work Regulations 1999. Approved Code of Practice and guidance L21 (Second edition) HSE Books 2000 ISBN 0 7176 2488
- (9) Health and Safety at work act

- http://www.hseni.gov.uk/l21_management_of_health_and_safety_at_work.pdf
- (10) Teamwork
- a. Society and College of Radiographers Radiotherapy moving forward: Delivering new radiography staffing models in response to the Cancer Reform Strategy London: SCoR, 2009
<https://www.sor.org/learning/document-library/radiotherapy-moving-forward-delivering-new-radiography-staffing-models-response-cancer-reform> (2009)
 - b. Society and College of Radiographers Implementing the career framework in radiotherapy - policy into practice London: SCoR, 2009
https://www.sor.org/system/files/document-library/public/Implementing_the_career_framework_in_radiotherapy_10Aug2009.pdf
 - c. DHSSPS Comprehensive review of the radiographic workforce: Report of the project group, 2002
http://www.dhsspsni.gov.uk/radiography_workforce.pdf (2002)
 - d. Royal College of Radiologists/College of Radiographers Team working in Clinical Imaging London: RCR, 2012
[https://www.rcr.ac.uk/sites/default/files/publication/BFCR\(12\)9_Team.pdf](https://www.rcr.ac.uk/sites/default/files/publication/BFCR(12)9_Team.pdf)
- (11) HEE workforce plans
<http://hee.nhs.uk/work-programmes/workforce-planning>
- (12) Guidance on out of hours working and your personal scope of practice
<http://www.sor.org/learning/document-library/guidance-out-hours-working-and-your-personal-scope-practice>
- (13) The Radiotherapy board
<https://www.sor.org/practice/radiotherapy/uk-radiotherapy-board>
- (14) The Clinical Imaging Board
<http://www.ipem.ac.uk/ProfessionalMatters/ClinicalImagingBoard.aspx>
- (15) HCPC Standards of proficiency radiographers
http://www.hcpc-uk.co.uk/assets/documents/10000DBDStandards_of_Proficiency_Radiographers.pdf
- (16) DoH Managing High value capital equipment in the NHS
<http://www.nao.org.uk/wp-content/uploads/2011/03/1011822.pdf>
- (17) Guidance on the Management and Governance of additional radiotherapy capacity IPEM
<http://www.ipem.ac.uk/Portals/0/Documents/Publications/Guidance%20on%20the%20Mgt%20and%20Governance%20of%20additional%20RT%20capacity%202013.pdf>
- (18) SCoR Continuing Professional development and regulatory requirements
<https://www.sor.org/learning/document-library/continuing-professional-development-professional-and-regulatory-requirements>
- (19) SCoR Education and Career Framework
<https://www.sor.org/learning/document-library/education-and-career-framework-radiography-workforce>

- (20) Research and the Radiography professions
<https://www.sor.org/learning/document-library/research-and-radiography-profession-strategy-research-2010-2015>
- (21) SoR Safety in Magnetic resonance imaging <https://www.sor.org/learning/document-library/safety-magnetic-resonance-imaging/15-staffing-mri-units>
- (22) Imaging Services Accreditation Scheme
<https://www.isas-uk.org/default.shtml>
- (23) SoR Ultrasound Examination times
<https://www.sor.org/learning/document-library/ultrasound-examination-times-and-appointments/scor-guidance>
- (24) HSE Working Alone, 2013
<http://www.hse.gov.uk/pubns/indg73.pdf>
- (25) SoR Violence and Aggression at work including working alone
<https://www.sor.org/learning/document-library/violence-and-aggression-work-including-lone-working/lone-working>