

DENTAL RADIATION PROTECTION POLICY

Solent NHS Trust policies can only be considered to be valid and up-to-date if viewed on the intranet. Please visit the intranet for the latest version.

Purpose of Agreement	To outline the policy for radiography and the procedures required to comply with current legislation (IRMER2017 and IRR2017) within Solent Dental Service.
Document Type	✓ Policy SOP Guideline
Reference Number	Solent/DS/01
Version	V8
Name of Approving Committees/Groups	Dental Service Clinical Governance Committee, Policy Steering Group, Clinical Executive Group
Operational Date	July 2022
Document Review Date	July 2025
Document Sponsor (Job Title)	Radiation Protection Supervisor
Document Manager (Job Title)	Dental Service Administration Manager
Document developed in consultation with	Dental Service staff, Dental Service Audit Group, Medical Physics Experts/Radiation Protection Advisors Southampton University Hospitals Trust and Portsmouth Hospitals Trust
Intranet Location	Business Zone > Policies, SOPs and Clinical Guidelines
Website Location	Publication Scheme
Keywords (for website/intranet uploading)	Policy, procedure, protocol, IRMER, IRR, radiography, radiation, DS01

AMENDMENTS SUMMARY

Amend No	Issued	Page(s)	Subject	Action Date
1	Aug 03	9	Research and Education & Training needs	
2	10 Oct 05	8	Scope wording for policies relating to	
			patients/clients	
3	23 Jan 06	7	Impact assessment	
4	12 Dec 08	10	Monitoring compliance & effectiveness	
5	27 Oct 09	All	New 'Legal Person', RPS and digital	18 Nov 09
			radiography	
6	18 July 13	All	Re write for additional clinic entries and 2 Jan 14	
			revised audit procedures	
7	7 Apr 14	28	Confirmation of controlled area	
8	1 Aug 2015		New 'Legal Person' and procedures	31 Aug
			appendix for digital radiography	2015
9		All	Revision of DRLs and personnel/posts	4 February
				2016
10	8/5/19	All	Updated for 2017 regulation changes,	25 June
			personnel and posts	2019
11	27/4/22	All	Responsibilities and IMER procedures list,	22 April
			All pages formatted	2022

Review Log

Include details of when the document was last reviewed:

Version Number	Review Date	Lead Name	Ratification Process	Notes
4	27 Oct 09	P Howard	N/A – document review	Revised and re- issued
5	18 July 13	P Howard	N/A – document review Taken to NHSLA for advice and reviewed in 2015 by Radiation Protection Advisers	Revised and re- issued
6	20 Feb 2017	P Howard	N/A document review	Revised and re- issued
7	8 May 2019	P Gilliland	Policy steering group and reviewed by RPA's	Revised and re- issued
8	June 2022	P Gilliland	Policy steering Group, reviewed by RPA's, Clinical Executive Group. Changes include: Introduction and purpose updated Scope and definitions updated Glossary added, Equality Impact Assessment template updated	Revised due to standard 3 year review

SUMMARY OF POLICY

Radiography is a form of medical diagnostic imaging used in the diagnosis and treatment of conditions. Within Solent NHS Trust, the Special Care Dental Service is the main user of X-Ray machines for producing dental images. The clinicians within the Dental Service can both prescribe for diagnosis and operate equipment to produce dental images.

The Employers Procedures are required by statute and this Policy represents the Employer's Procedures for Solent NHS Trust, including Local Rules and Safe Systems of Work, alongside useful advice on day to day matters for radiography.

Contents

ltem		Page
1	INTRODUCTION AND PURPOSE	5
2	SCOPE AND DEFINITIONS	5
3	ROLES AND RESPONSIBILITIES	6
4	QUALIFIED EXPERT ADVICE	7
5	TRAINING	7
6	EQUALITY IMPACT ASSESSMENT	8
7	REVIEW	8
8	GLOSSARY	9
9	REFERENCES AND LINKS TO OTHER DOCUMENTS	10
	Appendices	
	Appendix A: EQUALITY IMPACT ASSESSMENT	11
	Appendix B: ESSENTIAL CONTENTS OF THE RADIATION PROTECTION FILE	15
	Appendix C: GLOSSARY	18
	Appendix D: REFERENCES	19

1. INTRODUCTION & PURPOSE

- 1.1 This document outlines Solent NHS Trust Policy for use of medical diagnostic imaging with Ionising Radiation in the Dental Service. It does not include other forms of diagnostic imaging in other services.
- 1.2 A copy of this document and supporting Radiation File documents must be kept in each location where diagnostic imaging using ionising radiation is carried out
- 1.3 The purpose of this Policy is to ensure:
 - a) The safe and legal use of ionising radiations in order to protect patients, staff, visitors and the general public.
 - b) A reduction in the number of incidents relating to ionising radiation.
 - c) Compliance of the Trust with relevant legislation, principally the Ionising Radiations Regulations 2017 and the Ionising Radiation (Medical Exposure) Regulations 2017 and any other relevant legislation that comes into force during the currency of this policy.
- 1.4 It is the policy of the Trust to ensure the health and safety of its employees, of contractors working on the premises and of members of the public, including volunteers, visitors, etc, who may be exposed to the hazards arising from the use of ionising radiations.
- 1.5 The Trust will ensure that all diagnostic examinations involving medical exposure to ionising radiation are performed with the radiation dose to the patient being as low as reasonably practicable to achieve the required clinical purpose, consistent with the employer's written procedures and protocols.
- 1.6 The Trust is committed to a policy of restricting exposures to ionising radiation in accordance with the "as low as reasonably practicable" (ALARP) principle and will affect this through the organisational and management arrangements documented in this policy.
- 1.7 The Trust will comply with all statutory obligations relating to the use of ionising radiations. The Trust will appoint suitable expert advisers to support this.
- 1.8 The Trust will minimise the use of ionising radiations and will use alternative techniques wherever reasonably practicable.
- 1.9 The Trust will ensure that all employees concerned with the application or use of ionising radiations shall be appropriately qualified or have received relevant training and are closely supervised while training. Local managers are responsible for ensuring that this training is recorded in records of personnel.
- 1.10 The Trust will ensure that where practicable, patients or other persons exposed to ionising radiations receive appropriate information and have it available in an Accessible format.
- 1.11 This Policy should be read and used in conjunction with other relevant documents/guidance: Statutory Instrument 2017 No. 1075. The Ionising Radiations Regulations 2017 Statutory Instrument 2017 No. 1322. The Ionising Radiation (Medical Exposure) Regulations 2017 (as amended)
 - Standard Operating Procedure for referring patients to a Dental Nurse in the Special Care Dental Service Standard Operating Procedure for referring patients to a Dental Therapist in the Special Care Dental Service
 - Standard Operating Procedure for IRMER Ionising Radiation (Medical Exposure) Regulations (IR(ME)R)

2. SCOPE & DEFINITIONS

2.1 This policy applies to locum, permanent, and fixed term contract employees (including apprentices) who hold a contract of employment or engagement with the Trust, and secondees (including students), bank staff, Non-Executive Directors and those undertaking research

working within Solent NHS Trust, in line with Solent NHS Trust's Equality, Diversity and Human Rights Policy. It also applies to external contractors, agency workers, and other workers who are assigned to Solent NHS Trust.

- 2.2 This policy is also recommended to Independent Contractors as good practice.
- 2.3 All radiographic diagnostic imaging carried out within the Dental Service

3. ROLES & RESPONSIBILITIES

3.1 The **Chief Executive**:

Has overall responsibility for compliance with statutory obligations as laid out in the regulations. The chief executive must ensure the Trust appoints suitable and competent Radiation Protection Advisers (RPAs) and Medical Physics Experts; these persons are detailed in Ionising Radiation Regulations (IRR) SOP.

3.2 The Clinical Director and Clinical Leads of Solent Special Care Dental Service:

Have the responsibility for the management of the patients treated in this service and will supervise the governance carried out within the Dental Service to comply with the Regulations and this Policy.

3.3 The Clinical Director of Solent Special Care Dental Service:

Is responsible for appointing Radiation Protection Supervisors (RPSs), identifying Ionising Radiation (Medical Exposure) Regulation 2017 (IRMER) duty holders and ensuring they are appropriately trained. Sufficient resources to allow RPA and RPS duties to be carried out and ensure registration with the HSE for the use of x ray generating equipment

3.4 The Radiation Protection Supervisors (RPSs):

Are responsible for issuing local rules, maintaining day-to-day compliance in radiation areas and liaising with the RPAs as appropriate. Specifically:

- a) Compliance with The Regulations and arrangements set out in the Local Rules.
- b) Confirming appropriate training of all staff who work with the equipment and to include understanding of the Employers Procedures.
- c) Arrangements for the supervision of contractors, visitors and other persons who may come into contact with the x-ray equipment.
- d) Ensuring Quality Assurance (QA) programmes are kept up to date.
- e) Seeking advice from the RPA about the suitability of new x-ray equipment
- f) Confirming baseline QA measurements for newly installed or re-sited medical/dental x-ray equipment including Critical Exam and Acceptance Testing.
- g) Principal point of contact for liaison with the RPA, including for adverse incidents.
- h) Completing and recording remedial action from an RPA inspection.

3.5 To ensure coverage at all sites, **deputy RPSs** are appointed:

- a) Lead Radiography Dental Nurses will be appointed to geographical areas to assist the RPS and will act as Deputy RPS and will report directly to the RPS.
- b) Registered Dentists will also be appointed at specific sites (e.g. Secure Units) as deputies.
- c) Appropriate training will be provided for these duties.

3.6 The Radiography Lead:

Is responsible for authorising the Employers IRMER Procedures and protocols.

3.7 Dental staff:

And those that will use this policy are required to adhere to the arrangements made under this policy.

3.8 More detailed roles and responsibilities under IRMER and IRR are outlined in detail within the IRMER Employer Procedure Document and Local Rules.

4. QUALIFIED EXPERT ADVICE

- 4.1 The organisation must seek the advice of a Radiation Protection Adviser (RPA) in the following areas:
 - a) Implementation of the requirements for designated areas.
 - b) Prior examination of plans for the installation and acceptance into service of new or modified dental x-ray equipment, with respect to any engineering controls, design features, safety features and warning devices provided to restrict exposure to ionising radiation.
 - c) Regular checking of systems of work provided to restrict exposure.
 - d) Periodic examination and testing of engineering controls, design features, safety features and warning devices (radiation surveys of Trust dental radiography equipment and facilities).
 - e) Risk assessment.
 - f) Contingency Plans
 - g) Training of staff in radiation safety
 - h) Conduct of any investigations, required by The Regulations (e.g. following an incident or accident situation).
 - i) Advice on the suitability, use and checking of any instrument provided to measure levels of ionising radiation.
- 4.2 The organisation must seek the advice of a Medical Physics Expert in the following areas:
 - a) Acceptance testing and Quality Assurance programme.
 - b) Conduct of any investigations, required by The Regulations (e.g. following significant or accidental unintended patient exposure).
 - c) Advice on optimisation and safety of patient exposures
 - d) Advice on new techniques
 - e) Training of staff in IRMER

5. TRAINING

- 5.1 IRR requires that all employees involved in radiation practices have appropriate training in radiation safety. The training must be repeated at suitable intervals (at least every five years).
- 5.2 IRMER requires that every IRMER Practitioner and Operator has received adequate training detailed in the IRMER SOP, held in the radiation file and undertakes continuing education and training after qualification (see points 6.6 and 6.7)
- 5.3 The Learning & Development Team are partners in addressing any learning or training needs to assist the 'Legal Person'.
- 5.4 Adequate training for an IRMER Practitioner comprises:
 - a) For UK dental graduates, an undergraduate degree conforming to the requirements for the undergraduate dental curriculum in dental radiology and imaging and the core curriculum in dental radiography and radiology for undergraduate dental students.
 - b) For non-UK dental graduates, the 'Legal Person' should establish whether the IRMER Practitioner's undergraduate degree matches the above requirement.
 - c) Dental Therapists are classed as Practitioners providing, they qualified post October 2013 and completed an undergraduate degree conforming to the requirements for the undergraduate dental curriculum in dental radiology and imaging, and the core curriculum in

- dental radiography and radiology for undergraduate dental therapists. Those who qualified pre 2013 will have to undergo a postgraduate course in prescribing dental radiographs to be deemed as competent to do so, otherwise their role is classed as an operator.
- d) Operators whose duties include selecting exposure parameters and/or positioning the film, the patient and the tube head, should either be dental graduates with conforming undergraduate training or Dental Nurses possessing a Certificate in Dental Radiography, conforming to the syllabus prescribed by the College of Radiographers.
- 5.5 IRMER Practitioners, together with Operators, must regularly update their knowledge of and skills in intra-oral and panoramic radiology. Within the five-yearly recertification cycle, a Practitioner is expected to devote at least five hours to radiology and radiation protection and is recommended to attend formal courses covering all aspects of radiation which would be expected to cover:
 - a) The principles of radiation physics.
 - b) Risks of ionising radiation.
 - c) Radiation doses in dental radiography.
 - d) Factors affecting doses in dental radiography.
 - e) The principles of radiation protection.
 - f) Statutory requirements.
 - g) Selection criteria.
 - h) Quality assurance.
- 5.6 Dental Nurses and any other Dental Care Professionals (DCPs) whose duties include film processing and quality assurance, must have received adequate and documented training specific to the tasks that they undertake.
- 5.7 Dental Nurses and any other Dental Care Professionals (DCPs) who 'press the exposure button' as part of a patient exposure that has been physically set up by an adequately trained Operator, may only do so in the continued presence, and under the direct supervision, of that Operator. They must have received documented instruction appropriate to this task.
- 5.8 Those persons who have been confirmed as appropriately trained are included within the Radiation File on the list of 'Named Persons'. This list is reviewed annually against training records kept within the Dental Admin Office, which include CPD for re-registration / revalidation and the core subject records for Radiation Protection. Competencies will be formally recorded.
- 5.9 Training records are also checked at Annual Appraisal in order to confirm that training is current and the requirements of The Regulations for training are met. Appraisal outcomes will include provision for training as a mandatory requirement to be fully supported by the Employer.

6. EQUALITY IMPACT ASSESSMENT

An Equality, Diversity, Human Rights and Mental Health Assessment has been conducted in relation to this document. The Equality Impact Assessment is included as Appendix A.

7. REVIEW

7.1 This document may be reviewed at any time at the request of either staff side or management but will automatically be reviewed 3 years from initial approval and thereafter on a triennial basis unless organisational changes, legislation, guidance or non-compliance prompt an earlier review. Additional reviews may be required if new techniques or procedures are introduced.

- 7.2 Review will be carried out at annual Radiography Meetings with input from Radiation Protection Advisers and Medical Physics Experts.
- 7.3 Practitioners and Operators are made aware of any changes to the procedures and protocols by email notification from the Dental Administration Office and through written amendments.

8. GLOSSARY

IRR Statutory Instrument 2017 No. 1075. The Ionising Radiations Regulations 2017 **IRMER** Statutory Instrument 2017 No. 1322. The Ionising Radiation (Medical Exposure) Regulations 2017 (as amended). The All relevant regulations together are referred to as 'The Regulations' within The Radiation Regulations File. Radiation The Radiation File is this Policy Document, which states the Employers Procedures and Protection File Local Rules for Diagnostic Medical Imaging and operation of Radiography Equipment (Radiation within the Dental Service of Solent NHS Trust. The Radiation File contains records of File) equipment, servicing and audit documents for specific locations. **Patient** A person who has dental treatment provided under the National Health Service (Dental Charges) Regulations 2005 and who is subject to the provisions of the National Health Service (General Dental Services Contracts) Regulations 2005. **Dental Care** Dental Registrants such as Dental Nurses, Dental Therapists, Dental Hygienists and Dental Professional Technicians (i.e. those Registered with the General Dental Council (UK)) who are not (DCP) Registered Dental Surgeons. Abbreviated to 'DCP' in this document. 'Legal Person' The Employer (strictly the "Radiation Employer") who takes legal responsibility for implementing both sets of The Regulations and for the safety and maintenance of the equipment; for risk assessment; for reporting of radiography use and any adverse outcomes; and for Procedures and the Local Rules. The 'Legal Person' is defined in the Local Rules. Radiation Provider of expert advice to the 'Legal Person' on radiation protection in dentistry, risk assessment, procedures and equipment and facilities surveys. RPA is a designated Protection Adviser (RPA) appointment under IRR. Abbreviated to 'RPA' in this document.

Radiation Protection Supervisor (RPS) Appointed by the 'Legal Person' to ensure compliance with IRR, and in particular to supervise the arrangements set out in the Local Rules and System of Work, and responsible for compiling operating procedures and protocols on behalf of the 'Legal Person'. Whoever is appointed as an RPS has the authority directly delegated by the 'Legal Person' from The Regulations without reference to any other line of management to adequately implement their responsibilities. Abbreviated to 'RPS' in this document.

Medical Physics Expert (MPE) Applicable to members of the RPA team (or may be the same person as the RPA in smaller Medical Physics departments). MPE is the descriptive term for a qualified adviser under IRMER, specifically to give advice on such matters as the measurement and optimisation of patient dose. Abbreviated to 'MPE' in this document. Members of this team acting as MPEs will be acknowledged as Named Persons for purposes of testing equipment.

Named A person who has completed appropriate training under The Regulations in order to acas

Person an Operator within the Dental Service.

9. REFERENCES AND LINKS TO OTHER DOCUMENTS

This document is guided by, 'The Ionising Radiation (Medical Exposure) Regulations 2017' (referred to as IRMER)

https://www.cqc.org.uk/guidance-providers/ionising-radiation/ionising-radiation-medical-exposure-regulations-irmer

and 'The Ionising Radiation Regulations 2017' (referred to as IRR) – 'The Regulations'.

https://www.legislation.gov.uk/uksi/2017/1075/contents/made

Terms used within this document are detailed at Appendix C.

References and reading / educational material are listed as Appendix D.

Appendix A

EQUALITY & HUMAN RIGHTS IMPACT ASSESSMENT

Equality Analysis and Equality Impact Assessment

Equality Analysis is a way of considering the potential impact on different groups protected from discrimination by the Equality Act 2010. It is a legal requirement that places a duty on public sector organisations (The Public Sector Equality Duty) to integrate consideration of Equality, Diversity and Inclusion into their day-to-day business. The Equality Duty has 3 aims, it requires public bodies to have due regard to the need to:

- **eliminate unlawful discrimination**, harassment, victimisation and other conduct prohibited by the Equality Act of 2010.
- advance equality of opportunity between people who share a protected characteristic and people who do not.
- **foster good relations** between people who share a protected characteristic and people who do not.

Equality Impact Assessment (EIA) is a tool for examining the main functions and policies of an organisation to see whether they have the potential to affect people differently. Their purpose is to identify and address existing or potential inequalities, resulting from policy and practice development. Ideally, EIAs should cover all the strands of diversity and Inclusion. It will help us better understand its functions and the way decisions are made by:

- considering the current situation
- deciding the aims and intended outcomes of a function or policy
- considering what evidence there is to support the decision and identifying any gaps
- ensuring it is an informed decision

You can find further information via the e-learning module here

Equality Impact Assessment (EIA)

<u> </u>	/			
Step 1: Scoping and Identifying the Aims				
Service Line / Department	Special Care Dental Service			
Title of Change:	Dental Radiation Protection Policy			
What are you completing this EIA for? (Please select):	Policy (If other please specify here)			
What are the main aims / objectives of the changes	This document has been produced in accordance with the requirements for the use of medical diagnostic imaging with Ionising Radiation in the Dental Service as a framework to comply with IRMER and IRR. The policy has been compiled to provide guidance to Directors, Managers, Supervisors and Employees on the arrangements for managing safe use of X-Ray Equipment and maintaining high levels of radiation safety using QA measures.			

Step 2: Assessing the Impact

Please use the drop-down feature to detail any positive or negative impacts of this document /policy on patients in the drop-down box below. If there is no impact, please select "not applicable":

Protected Characteristic	Positive	Negative	Not	Action to address negative impact:
	Impact(s)	Impact(s)	applicable	(e.g. adjustment to the policy)
Sex			N/A	
Gender reassignment			N/A	
Disability			N/A	
Age			N/A	
Sexual Orientation			N/A	

Appendix A EQUALITY & HUMAN RIGHTS IMPACT ASSESSMENT

Pregnancy and		N _i	⁄A			
maternity Marriage and civi	il	N/	/A			
partnership		' '				
Religion or belief		N,	/A			
Race		N,	/A			
	to any of the following, you have considered w					
Assessment Ques	stions	Yes / No	Please do	ocument e	evidence / any mitic	gations
development, did others, for examp	rvice users, carers or	No				
	nto consideration any essional standards?	Yes	Ionis Statu Ionis	ing Radia tory Instr ing Radia	rument 2017 No. 10 ations Regulations 2 rument 2017 No. 13 ation (Medical Exponent) (as amended)	2017 322. The
Step 3: Review, R	isk and Action Plans					
	ate the overall level of		Lo	w	Medium	High
	sation if no action take					
	ds to be taken to reduc	e or				
eliminate the negative impact? Who will be responsible for monitoring and regular			The Dent	al Radiolo	ogy Lead	
review of the document / policy?		ana regala.			-9,	
Step 4: Authorisation and sign off						
I am satisfied that all available evidence has been accurately assessed for any potential impact on patients and groups with protected characteristics in the scope of this project / change / policy / procedure / practice / activity. Mitigation, where appropriate has been identified and dealt with accordingly.						
Equality Assessor:	Julia Pitt		Date:	27/05/	2022	

Appendix A EQUALITY & HUMAN RIGHTS IMPACT ASSESSMENT

Additional guidance

	itional guidance cted characteristic	Who to Consider	Example issues to consider	Further guidance
1. 2.	Disability Sex	A person has a disability if they have a physical or mental impairment which has a substantial and long-term effect on that person's ability to carry out normal day today activities. Includes mobility, sight, speech and language, mental health, HIV, multiple sclerosis, cancer A man or woman	 Accessibility Communication formats (visual & auditory) Reasonable adjustments. Vulnerable to harassment and hate crime. Caring responsibilities 	Further guidance can be sought from: Solent Disability Resource Group
			Domestic ViolenceEqual payUnder (over) representation	can be sought from: Solent HR Team
3	Race	Refers to an individual or group of people defined by their race, colour, and nationality (including citizenship) ethnic or national origins.	 Communication Language Cultural traditions Customs Harassment and hate crime "Romany Gypsies and Irish Travellers", are protected from discrimination under the 'Race' protected characteristic 	Further guidance can be sought from: BAME Resource Group
4	Age	Refers to a person belonging to a particular age range of ages (e.g., 18-30-year olds) Equality Act legislation defines age as 18 years and above	 Assumptions based on the age range Capabilities & experience Access to services technology skills/knowledge 	Further guidance can be sought from: Solent HR Team
5	Gender Reassignment	"The expression of gender characteristics that are not stereotypically associated with one's sex at birth" World Professional Association Transgender Health 2011	Tran's people should be accommodated according to their presentation, the way they dress, the name or pronouns that they currently use.	Further guidance can be sought from: Solent LGBT+ Resource Group
6	Sexual Orientation	Whether a person's attraction is towards their own sex, the opposite sex or both sexes.	 Lifestyle Family Partners Vulnerable to harassment and hate crime 	Further guidance can be sought from: Solent LGBT+ Resource Group
7	Religion and/or belief	Religion has the meaning usually given to it, but belief includes religious and philosophical beliefs, including lack of belief (e.g. Atheism). Generally, a belief should affect your life choices or the way you live for it to be included in the definition. (Excludes political beliefs)	 Disrespect and lack of awareness Religious significance dates/events Space for worship or reflection 	Further guidance can be sought from: Solent Multi- Faith Resource Group Solent Chaplain
8	Marriage	Marriage has the same effect in relation to same sex couples as it has in relation to opposite sex couples under English law.	PensionsChildcareFlexible workingAdoption leave	Further guidance can be sought from: Solent HR Team
9	Pregnancy and Maternity	Pregnancy is the condition of being pregnant or expecting a baby. Maternity refers to the period after the birth and is linked to maternity leave in the employment context. In non-work context, protection against maternity discrimination is for 26 weeks after giving birth.	 Employment rights during pregnancy and post pregnancy Treating a woman unfavourably because she is breastfeeding Childcare responsibilities Flexibility 	Further guidance can be sought from: Solent HR team

Appendix B ESSENTIAL CONTENTS OF A RADIATION FILE

Section One- This Policy

Section Two- Radiation File IRR-2017

Local Rules for this site Systems of Work (contained within Local rules) Risk Assessment

Section Three- Radiation File IRMER 2017 Employer's IRMER Procedures

- A: Patient Identification
- B: Individuals entitled to be IRMER duty holders
- C: Pregnancy Enquiry
- D: Quality assurance of procedures
- E. Assessment of Patient Dose
- F. The use and review of Diagnostic reference levels
- G. Procedures for medical research programmes
- H. Patient information regarding the administration of radioactive materials
- I: Information on benefits and risks of exposure
- J: Clinical evaluation
- K: Reducing the probability and magnitude of accidental exposures
- L: Managing significant, or clinically significant, accidental or unintended exposures
- M: Non-medical imaging exposures
- N: Constraints and guidance for carers and comforters
- O: Fact sheets and advice sheets

Section Four

Risk Assessment Local Rules and Systems of Work Equipment Inventory

Section Five

Radiography Operators and DCP's IRMER Certificates

Training Records

Section Six

Carer and Comforters recording sheets

Nomad Visit Sheets

Servicing and Medical Physics Reports

Section Seven

Computer Screen Checks

Phosphor Plate and DPT Checks

Radiography Log-Book Templates

Radiography Equipment Check Lists

Clinician and Nurses 3 monthly Audits

Section Eight

Handover Document

Equipment out of service notice

Appendix C GLOSSARY (EXTENDED)

IRR Statutory Instrument 2017 No. 1075. The Ionising Radiations Regulations

2017.

IRMER Statutory Instrument 2017 No. 1322. The Ionising Radiation (Medical

Exposure) Regulations 2017 (as amended).

The All relevant regulations together are referred to as 'The Regulations'

Regulations within The Radiation File.

Radiation Protection File (Radiation File) The Radiation File is this Policy Document, which states the Employers Procedures and Local Rules for Diagnostic Medical Imaging and operation of Radiography Equipment within the Dental Service of Solent NHS Trust.

The Radiation File contains records of equipment, servicing and audit

documents for specific locations.

Patient A person who has dental treatment provided under the National Health

Service (Dental Charges) Regulations 2005 and who is subject to the provisions of the National Health Service (General Dental Services

Contracts) Regulations 2005.

Dental Care Professional (DCP) Dental Registrants such as Dental Nurses, Dental Therapists, Dental Hygienists and Dental Technicians (i.e. those Registered with the General

Dental Council (UK)) who are not Registered Dental Surgeons.

Abbreviated to 'DCP' in this document.

'Legal Person' The Employer (strictly the "Radiation Employer") who takes legal

responsibility for implementing both sets of The Regulations and for the safety and maintenance of the equipment; for risk assessment; for reporting of radiography use and any adverse outcomes; and for

Procedures and the Local Rules.

The 'Legal Person' is defined in the Local Rules.

Radiation Protection Adviser (RPA) Provider of expert advice to the 'Legal Person' on radiation protection in dentistry, risk assessment, procedures and equipment and facilities

surveys. RPA is a designated appointment under IRR.

Abbreviated to 'RPA' in this document.

Radiation Protection Supervisor (RPS) Appointed by the 'Legal Person' to ensure compliance with IRR, and in particular to supervise the arrangements set out in the Local Rules and System of Work, and responsible for compiling operating procedures and protocols on behalf of the 'Legal Person'.

Whoever is appointed as an RPS has the authority directly delegated by the 'Legal Person' from The Regulations without reference to any other line of management to adequately implement their responsibilities.

Abbreviated to 'RPS' in this document.

Medical Physics Expert (MPE) Applicable to members of the RPA team (or may be the same person as the RPA in smaller Medical Physics departments). MPE is the descriptive term for a qualified adviser under IRMER, specifically to give advice on such matters as the measurement and optimisation of patient dose.

Abbreviated to 'MPE' in this document.

 $\label{eq:members} \mbox{Members of this team acting as MPEs will be acknowledged as Named}$

Persons for purposes of testing equipment.

Appendix C GLOSSARY (EXTENDED)

Referrer A qualified Medical or Dental Practitioner (Registered Dental Surgeon) or

other health professional who is entitled in accordance with the Employer's ('Legal Person's) Procedures to refer individuals for medical

exposure to an IRMER Practitioner.

IRMER Practitioner The Practitioner is a Registered Dentist or other health professional (Registered Dental Nurse, or Registered Dental Therapist) with specific training in taking radiographs and questioning / justifying requests for radiography.

The Practitioner is entitled in accordance with the 'Legal Person's procedures to take responsibility for an individual medical exposure.

The primary function of The Practitioner is to undertake the Justification of individual exposures.

IRMER Operator The Operator is any person who is entitled with the 'Legal Person's procedures, to carry out all or part of the practical aspects associated with a radiographic examination.

IRMER Referrer The Referrer supplies clinical information regarding each medical exposure to enable the Practitioner to decide that there is a net benefit to the patient in executing that medical exposure and that it is therefore justified.

Named Person

A person who has completed appropriate training under The Regulations in order to act as an Operator within the Dental Service.

DPT/OPG/OPT

Dental Panoramic Tomogram OPG/OPT are interchangeable terms for Orthopantomography – a tomographic radiography view of the jaws.

Peri Apical

A type of imaging view in common use in dentistry.

(PA)

Abbreviated to 'PA' in this document.

Bite Wing

A type of imaging view in common use in dentistry.

(BW)

Abbreviated to 'BW' in this document.

Bi Molar (BM)

A type of extra-oral imaging view in common use in dentistry showing both sides of the jaws. Also referred to as Oblique Lateral or Lateral Oblique when only one side of the jaws is shown.

Abbreviated to 'BM' in this document.

Vertex Occlusal A type of imaging view in use in dentistry but not usually used in this

Dental Service because of the risk of high Thyroid dose.

Justification

The process of considering whether a medical exposure should be made

by a Practitioner.

Optimisation

The process of bringing the most valuable diagnostic information from imaging through ensuring that doses arising from exposures are kept as

low as reasonably practicable.

Authorisation

The means by which it can be demonstrated that Justification has been carried out. The method of authorisation is normally the written Justification by an appropriate person in the clinical records.

Risk Assessment The 'Legal Person' is required to have undertaken a risk assessment for the purpose of identifying the measures needed to restrict exposure of

persons to ionising radiation.

Appendix C GLOSSARY (EXTENDED)

Quality Assurance (QA) The purpose of Quality Assurance is to ensure consistently adequate diagnostic information, whilst radiation doses to patients and staff are

controlled to be as low as reasonably practicable (ALARP).

Abbreviated to 'QA' in this document.

Controlled Area A Controlled Area around the dental x-ray equipment is defined to control

routine and potential exposures to staff and other persons.

This normally includes prohibiting normal access to the controlled area during radiography and operating within procedures that are incorporated

into Local Rules.

Supervised Area The term Supervised Area is not considered to apply within Solent NHTS Trust Dental Service as it is unlikely that anyone's annual dose would

exceed the current threshold limit.

Appendix D REFERENCES

REGULATIONS

Ionising Radiation (Medical Exposure) Regulations 2017. Statutory Instrument 2017 No 1322. https://www.cqc.org.uk/guidance-providers/ionising-radiation/ionising-radiation-medical-exposure-regulations-irmer

The Ionising Radiations Regulations 2017. Statutory Instrument 2017 No. 1075. https://www.legislation.gov.uk/uksi/2017/1075/contents/made

POLICIES

Clinical Diagnostic Testing Policy. Procedures for clinical tests and screening. Southampton Community Healthcare, 2007. (as amended).

Policy for Consent to Examination or Treatment. Standards and procedures in Solent NHS Trust which aim to ensure that health professionals can comply with the guidance issued by the Department of Health (2001, updated in 2009). Solent NHS Trust, 2011 (as amended).

PUBLICATIONS

Selection Criteria for Dental Radiography. Faculty of General Dental Practitioners (UK), Third Edition 2013 (as updated Feb 2018). The Royal College of Surgeons of England.

Recommended Standards for Routine Performance Monitoring of Diagnostic X-ray Imaging Systems. IPEM Report 91. Institute of Physics and Engineering in Medicine, College of Radiographers and the National Radiological Protection Board, 2005. (IPEM, York).

Doses to patients from Radiographic and Fluoroscopic X-Ray imaging procedures in the UK HPA-CRCE-034. 2010 review. (HPA June 2012)

Guidance Notes for Dental Practitioners on the Safe Use of X-ray Equipment. National Radiological Protection Board (NRPB), 2001.

PHE and FGDP- guidance notes for dental practitioners on the safe use of x ray equipment 2^{nd} edition 2020