

HSE Mid West Community Healthcare

Oral Health Services Ionising Radiation Protection Policy Part A1

HSE Mid West Community Healthcare

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á Forbairt

FOREWORD

As Chief Officer and members of the senior management team of HSE Mid West Community Healthcare, we are delighted to support the HSE Mid West Community Healthcare Oral Health Services Ionising Radiation Protection Policy and Oral Health Services Ionising Radiation Management and Everyday Practice Guideline. This Policy and Guideline will help to ensure the delivery of safe, high-quality care for our service users.

The use of ionising radiation in Oral Health Services provides diagnostic information for practitioners and service users. However, in the interest of service users' safety, it is vital that exposure to radiation is kept to a minimum. The implementation of this *Policy and Guideline* will give confidence to practitioners and service users alike, that an integrated and evidence-based approach is being followed by appropriately trained professionals.

On behalf of the management team, we would like to thank all members of the *Policy and Guideline* development group for their work, including its Chair Dr Andrew Bolas. We also wish to acknowledge the hard work of Noreen O'Regan, Quality, Risk and Patient Safety Advisor and Dr Mary Hurley, Senior Dental Surgeon Administrative.

We now look forward to ensuring that HSE Mid West Community Healthcare as a whole, and in particular our Oral Health Services team, will support the implementation of this *Policy and Guideline* and ensure the transformation of our Oral Health Services over the coming years.

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Building a Better Health Service	irbhís Sláinte is Fearr orbairt	MIDWEST PRIMARY CARE SERVICES	HSE Mid West Community Healthcare		
MWCH Oral Health	MWCH Oral Health Services Ionising Radiation Protection Policy Part A1				
Policy X	Procedure	Protocol	Guideline		
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PART A: MID WEST COMMUNITY HEALTHCARE, ORAL HEALTH SERVICES IONISING RADIATION PROTECTION POLICY, PART A1

Table of Contents

	Introduction		6
1.1	Purpose		6
1.2	Scope		7
1.3	Glossary of Abl	breviations, Terms and Definitions	8
1.4	Governance Ar	rangements for Ionising Radiation Protection	8
1.5	Roles and Resp	onsibilities	18
1.6	Appendices		
	Appendix I	Signature Sheet	19
	Appendix II	Glossary of Abbreviations, Terms and Definitions	20
	Appendix III	Roles & Responsibilities	36
	Appendix IV	MWCH Oral Health Services Ionising Radiation	
		Protection Committee Terms of Reference	45
	Appendix V	MWCH Primary Care Quality & Safety Governance	46

INTRODUCTION

It is the policy of the HSE Mid West Community Healthcare, Oral Health Services to ensure the safe and effective use of ionising radiation throughout the ionising radiation process, in accordance with the HIQA National Standards for Safer Better Healthcare (2012), Ionising Radiation Regulations, 2019 (S.I. No. 30 of 2019), hereafter called IRR19, and the Principal Regulations SI 256 of 2018 and subsequent regulations (S.I 332 and 413 of 2019) and are cited together as the European Union (Basic Safety Standards for Protection Against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018 and 2019.

MWCH Oral Health Services have implemented the Governments COVID-19 Working Safely Protocol, Midwest Community Healthcare Organisation COVID-19 Response Plan and all guidance issued by the Government, Health and Safety Authority (HSA), the Health Surveillance and Protection Centre (HPSC) and Antimicrobial Resistance and Infection and Control (AMRIC) to ensure the safety, health and welfare of our staff, service users and others who may be affected by the delivery of our services in the community.

1.1 PURPOSE

- 1.1.1 The purpose of this policy is to outline the commitment of the HSE Mid-West Community Healthcare Oral Health Services to:
 - 1.1.1.1 Ensure that Dental Radiography is performed in a manner which is consistent with good radiation protection practices.
 - 1.1.1.2 Comply with relevant Irish legislation; in particular S.I. 30 of 2019 and S.I. 256 of 2018, the conditions of the licence and the Code of Practice issued by the EPA Office of Radiological Protection (ORP), to protect the public, staff and patients.
 - 1.1.1.3 Adhere to any guidelines or regulations issued by the National Radiation Protection Committee and/or the Dental Council and any other Statutory Body.
 - 1.1.1.4 Adhere to any guidelines or regulations issued by the Government, HSA, HSPC and AMRIC.
 - 1.1.1.5 Assist staff in understanding their role in, and the need to adopt, a consistent approach to ionising radiation protection.
 - 1.1.1.6 Set out the systems and processes that are required to ensure that ionising radiation is managed consistently across the Mid West Oral Health Services.
- 1.1.2 This policy supports the purpose by:
 - 1.1.2.1 Clearly defining the roles and responsibilities for ionising radiation protection.
 - 1.1.2.2 Outlining a consistent process for the management of ionising radiation protection.
 - 1.1.2.3 Seeking to embed ionising radiation protection as part of the normal day-to-day activities in delivering healthcare services.
 - 1.1.2.4 Outlining the process for the safe delivery of ionising radiation in everyday practice.
 - 1.1.2.5 Identifying the resources to support the implementation of this policy.
- 1.1.3 This guideline must be read and used in conjunction with *MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline, 2021.*

1.2 SCOPE

- 1.2.1 This policy applies to staff employed in the Mid West Oral Health Services which comprise of Dental Services, Orthodontic Services and Restorative Dentistry Services.
- 1.2.2 Dental services are provided to:
 - 1.2.2.1 Children up to the age of 16 years.
 - 1.2.2.2 Adults with special care needs.
 - 1.2.2.3 Patients treated under the Dental Treatment Service Scheme.
 - 1.2.2.4 Children and Adults Holding a European Health Insurance Card from another country requiring emergency dental care.
 - 1.2.2.5 Any patient group or individual deemed eligible by the Minister for Health or CEO of the HSE.
 - 1.2.2.6 All HSE Acute Hospital inpatients and residents of HSE maintained facilities have eligibility for dental services.
 - 1.2.2.7 Private adult patients do not avail of the Mid West Dental Service.
- 1.2.3 Orthodontic services are provided to:
 - 1.2.3.1 Children up to the age of 16 years provided they have been considered eligible for HSE orthodontic treatment in accordance with the Modified IOTN Eligibility Guidelines and their treatment may continue into adulthood.
 - 1.2.3.2 Children and young adults holding a European Health Insurance Card from another country requiring emergency Orthodontic care.
 - 1.2.3.3 Patients treated under the Dental Treatment Service Scheme are ineligible for HSE orthodontic treatment.
 - 1.2.3.4 Any patient group or individual deemed eligible by the Minister for Health or CEO of the HSE.
 - 1.2.3.5 Private adult patients do not avail of the Mid West Orthodontic Service.
- 1.2.4 Restorative Dental Services are provided to:
 - 1.2.4.1 Children up to the age of 16 years with complex restorative treatment needs who have been referred from the HSE Orthodontic, Oral & Maxillofacial, Dental or Acute Hospital Services.
 - 1.2.4.2 Adults with complex restorative treatment needs who have been referred from the Orthodontic, Oral & Maxillofacial, Dental & Acute Hospital Services.
 - 1.2.4.3 Patients treated under the Dental Treatment Service Scheme who have been referred for complex restorative treatment.
 - 1.2.4.4 Children and Adults holding a European Health Insurance Card from another country requiring emergency restorative care.
 - 1.2.4.5 Any patient group or individual deemed eligible by the Minister for Health or CEO of the HSE.
 - 1.2.4.6 Private adult patients do not avail of the Mid West Restorative Dental Service.
- 1.2.5 Members of the public who attend with service users.
- 1.2.6 Third party companies who are appointed to facilitate the provision of a service to the MWCH.

1.3 GLOSSARY OF ABBREVIATION , TERMS AND DEFINITIONS

See Appendix II

1.4 GOVERNANCE ARRANGEMENTS IN MWCH PRIMARY CARE ORAL HEALTH SERVICES

1.4.1 Governance

In Mid West Oral Health Services effective governance arrangements are in place to ensure coordinated communication across the organisation for the benefit of patient, staff and public safety. As a result, the optimum care received by service users is delivered by appropriately trained and recognised healthcare professionals who are integrated in their approach to ionising radiation protection. Effective governance and management arrangements promote an open culture among staff, service users and the public where feedback is sought to improve practice. Continual improvement ensures a systematic process to raise standards, capacity and capability, with a focus on integrated improvements with clearly defined objectives to provide a quality and safe service. A culture of learning and supporting staff training and development is essential to the on-going safe delivery of medical exposures and enhancement of patient care. The MWCH Oral Health Services is held responsible by the Environmental Protection Agency (EPA) for staff and public safety and by HIQA for patient protection from Ionising radiation. An integrated approach is reflected throughout the MWCH Oral Health Services Ionising Radiation Protection Policy and the MWCH Oral Health Services Ionising Radiation Protection Management and Everyday Practice Guideline to satisfy the statutory requirements of both agencies and these are outlined below. There is clear allocation of responsibilities for Ionising Radiation and the protection of patients, staff, and the public in the Mid West Oral Health Services see the Organogram Figure 1.0, and Appendix III – Roles and Responsibilities.

- 1.4.1.1 The undertaking is the entity with primary legal responsibility for compliance with the Regulations SI 256 Of 2018 (HIQA). The Health Service Executive is the registered undertaking
- 1.4.1.2 The undertaking representative for the HSE is the Deputy Director General and Chief of Operations, who has delegated the Chair of the National Radiation Protection Committee as the HSE representative with HIQA.
- 1.4.1.3 The HSE, as the undertaking, must maintain oversight of ionising radiation protection practices across all public and HSE funded organisations and in this regard, has established the National Radiation Protection Committee (NRPC). The NRPC considers the requirements of both SI 256 (2018) and IRR19 and works closely with local Radiation Safety Committees established in all locations. The HSE National Radiation Protection Office supports the work of the NRPC.

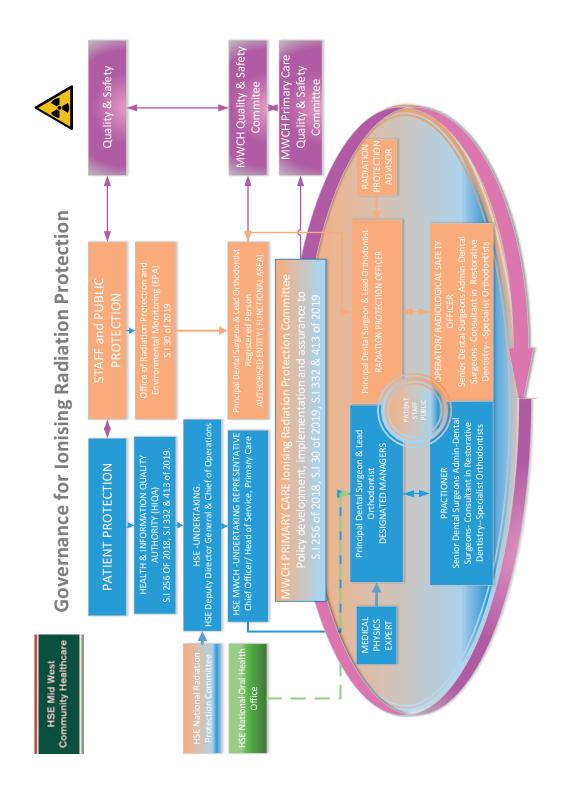
- 1.4.1.4 The HSE, as the undertaking, has delegated the responsibilities for Ionising Radiation Protection through delegation and sub delegation orders.
 - 1.4.1.4.1 The MWCH Chief Officer has been designated as the undertaking representative for the MWCH with HIQA and she has delegated the Head of Service Primary Care with the reserved function of oversight for Ionising Radiation in Oral Health Services.
 - 1.4.1.4.2 The Chief Officer of MWCH has been identified by the HSE to HIQA as a key stakeholder for communications as part of the declaration process of undertakings that carry out medical exposure to ionising radiation under the European Union (Basic Safety Standards for Protection against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018 and 2019. The Chief Officer has been assigned "super-user" access rights to a personalised Portal Account and assigns the sub user accounts to the Designated Manager/RPO and their nominated delegates.
- 1.4.1.5 The Head of Service has sub-delegated the day-to day- "Holder/Undertaking" functions to the Principal Dental Surgeon and The Lead Orthodontist, both hereafter will be termed as the Designated Manager.
- 1.4.1.5.1 Each Designated Manager is the registered person with the Environmental Protection Agency (EPA) and is accountable as the Radiation Protection Officer (RPO), hereafter termed as the Designated Manager/RPO. As the registered person they act on behalf of the MWCH Oral Health Services and register the same as the Authorised Entity (Functional area) with the EPA. Their responsibilities are outlined in Appendix III and the processes to ensure quality and safety are outlined in detail in the MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline.
- 1.4.1.5.2 The Designated Managers/RPOs have sub- delegated the responsibilities for patient, staff and the public protection to the Practitioner/Radiological Safety Officers in the outlying clinics. Their responsibilities are outlined in Appendix III and the processes to ensure quality and safety are outlined in detail in the MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline.
- 1.4.1.6 The MWCH Oral Health Services, Ionising Radiation Protection Committee (IRPC) is in place and has responsibility for recommending ionising radiation protection measures for dental radiography. The IRPC is chaired by the Head of Service, Primary Care. Terms of Reference for the IRPC are set out in Appendix IV. The IRPC provides assurance of the quality & safety in Ionising Radiation Protection to the Quality & Safety Committee for Primary Care, Appendix V.
- 1.4.1.7 The Medical Physics Expert (MPE)/Radiation Protection Adviser (RPA) advises the IRPC and additional responsibilities are outlined in Appendix III.

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 1.4.1.8 The MWCH Oral Health Services have implemented;
 MWCH Oral Health Services, Ionising Radiation Protection Policy.
 MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline.

Figure 1.0

HSE Mid West Community Healthcare, Governance for Ionising Radiation Protection in Primary Care, Oral Health Services. This organogram outlines the delegation and sub delegation of authority, autonomy, and responsibility for Ionising Radiation Protection in the HSE to MWCH Primary Care, Oral Health Services.



1.4.1.9 GOVERNANCE ARRANGEMENTS IN MID WEST COMMUNITY HEALTHCARE ORAL HEALTH SERVICES.

Referrers	Referrers in the MWCH Oral Health Services are the Practitioner employed within the Oral Health Services. External referrals are not permitted other than in exceptional circumstances. Referrals are managed and documented as per the procedures outlined in MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline. Self-exposures or performance of exposures on others which have not been clinically prescribed and justified are strictly prohibited.			
Practitioners		Within the MWCH Oral Health Services all dentists and orthodontists on the live register of the Dental Council are Practitioners.		
Operators	Radiographic equipmen patients under the opractitioner. Others may operate the course of training in ra- techniques approved by	lirection and su e equipment if the diation protection	pervision of the ey have followed a and radiographic	
Diagnostic Referencing levels	Diagnostic Referencing levels (DRLs) are dose levels set to aid optimisation of diagnostic and interventional medical exposures. They provide a standard for comparison to help ensure the radiation protection of patients undergoing these types of medical radiological procedures. DRLs help to ensure that the radiation dose received by patients for a specific type of medical radiological procedure is optimised. The MPE/RPA has conducted an estimation of the DRL for each radiological procedure for each type of machine. The following parameters apply for each type of radiological procedure;			
	Procedure	DRL Quantity	DRL	
	Intra Oral	Ka, i	1.2mGy	
	Panoramic	РКА	81mGy/cm2	
	Lateral Cephalometric	РКА	35mGy/cm2	

Person Centred Care	The MWCH Oral Health Services place person-centred care and support to its service users at the centre of all that the service does. It does this by advocating for the needs of service users, protecting their rights, respecting their values, preferences and diversity and actively involving them in the provision of care. Person-centred care and support promotes kindness, consideration and respect for service users' dignity, privacy and autonomy. Service users experience care and support that recognises the potential impact that requiring care can have on individuals and their families. As much as possible, people are supported to look after their own health and wellbeing and when service users do seek care, treatment or support they experience a person-centred service that responds in a manner that places the service users at the centre of all it does (See section 1.4.9- Oral Health Services Ionising Radiation Protection Management and Everyday Practice Guideline). Regular evaluation of services to assess how well they are meeting the identified needs and preferences of service users is undertaken through service user surveys. Feedback from service users is used to continuously improve the experience for all service users.
Protocols for standard radiological practices	Protocols for the following radiographs are in place; Bitewing Radiograph Periapical Radiograph Maxillary Occlusal Radiograph Mandibular Occlusal Radiograph Orthopantomogram/Dental Panoramic Tomograph Cephalometric Lateral Radiograph
Estimation of population doses	Estimation of population dose is a national function. Locally the number and type of exposures for each clinic is accessible on the shared drive and the local clinic log. Practitioners record all radiographs taken using the patient record on SOEL Health and data can be sourced nationally there.
Medical Physics Expert and Radiation Protection Adviser	A medical physics expert MPE is an individual having the knowledge, training and expertise to act or give advice on matters relating to radiation physics applied to medical exposure, whose competence in this respect is recognised by the Minister for Health and in transitional arrangements by the Irish College of Physicists in Medicine. An RPA is a qualified expert approved by the EPA to provide radiological protection advice pursuant to IRR19. The EPA publishes a list of approved RPAs on its website. An MPE has been retained by the Head of Service and is on the live register of the Medical Physic Experts. The MPE has a dual functionality as the RPA.

Professional Qualifications Registration, Delegation, Education, and training in the field of dental exposures	The MWCH Oral Health Services maintain a register of the dentists and orthodontists employed. The register includes evidence of the practitioner's live registration with the Dental Council and continuing education. The designated manager/RPO delegates the practical aspects of a dental radiological procedure to each practitioner. Arrangements are in place to ensure practitioners receive up to date training in ionising radiation regulations and practices as outlined in MWCH Oral Health Services Ionising Radiation Protection Management and Every Day Practice Guideline.
Justification	Justification is a process whereby the clinician must balance the potential harm to the patient with the potential benefits from the radiographic exposure. This weighing up of options should be carried out for every exposure, no matter how large or small the radiation dose might be. Justification is evidenced in the Service User Pathway for person centred ionising radiography taking into account all HSE related policies, procedures, protocols and guidelines.
Dose Constraints	The MPE/RPA has determined that the dose constraints for comforters/carers and members of the public does not exceed 3 mSv per event or duration of exposure for an Adult (not pregnant) or 15 mSv per event or duration of exposure for adults over 60 as specified by HIQA.
Optimisation	Patient exposure must be kept As Low As Diagnostically Achievable Being Indication-oriented and Patient-specific (ALADAIP), (Kuhnisch, J et al, 2019). Optimisation of doses arising from dental exposures is kept ALADAIP to maximise radiation protection for service users while accomplishing the objectives of the exposure.
Quality Assurance Programme - Radiological Equipment	The MWCH, Oral Health Services have arrangements in place to ensure that dental radiological equipment in clinical use is safe for use and fit for purpose. This ensures that service users undergoing dental exposures receive an optimal dose of radiation. The Designated Manager/RPO maintains the EPA authorisation requirements. The engagement of the RPA/MPE is pivotal to ensure safe equipment. A comprehensive register of radiological equipment is maintained in each oral health service. Controls and processes have been implemented to assure robust and safe equipment management. All staff have been made aware of their obligation to report any malfunctioning equipment. Quality Assurance checks are performed on all radiological equipment by the MPE/RPA at least every two years. The equipment is checked by the MPE/ RPA following any major maintenance (e.g. tube replacement). Film processors are cleaned and maintained in accordance with manufacturer's instructions.

Dosimetry	In accordance with RPII guidelines of 2011, personal Dosimetry is not necessary in dental practices subject to the conclusions of a risk assessment which is conducted by the MPE/RPA in conjunction with the designated manager/RPO. The MPE/RPA conducts a risk assessment at least once during a two-year period (or a timeframe agreed by the IRPC), or more often in cases of increased X-ray workload or the introduction of new X-ray technology. Unless the MPE/RPA risk assessment indicates otherwise, persons involved in dental radiography are unlikely to exceed annual public radiation dose limits and it is not necessary to designate workers as "Exposed Workers" as defined in S.I. 30 of 2019.
Lead Aprons & Thyroid Collars	Lead aprons are only required to be worn by persons involved in the holding of patients. Thyroid collars are used where the patient's thyroid gland is in the main primary beam, unless it interferes with the image (e.g. thyroid collars should be used in cephalometric radiography where collimation includes the thyroid, but not in panoramic radiography). For patients under 30 years, thyroid collars are used for intra- oral radiography where circular collimation is used. The Designated Manager/RPO will conduct an inspection of lead aprons and thyroid collars annually and this is documented, reported to the IRPC with a quality improvement plan.
Pregnancy	When a member of staff who works in or near a controlled area becomes pregnant, she informs the Designated Manager/ RPO who reviews her work conditions and conducts a risk assessment in line with HSE human resource procedures. This includes the risk of exposure to ionising radiation. There is no requirement to provide a lead apron to a pregnant patient.
Comforters /carers	Members of the public needed to assist service users are known as comforters/carers; they shall avoid the direct beam and must wear a lead apron. The same person must not regularly perform these duties, which should be normally performed by a relative. In accordance with Dental Council recommendations, pregnant women should be precluded from the role of helper. As such, women of childbearing capacity should be asked if they could be pregnant prior to acting as a helper.
Third Party companies/personnel	Service engineers must not expose themselves or others to ionising radiation to a greater extent than is necessary for the purpose of their work and they must co-operate with the Designated Manager/ RPO and the MPE/RPA on safety matters. Service engineers working on or servicing x-ray equipment are responsible for their own safety in accordance with their employer's instructions. They must also agree to observe the controls in place in the MWCH Oral Health Services.

Incident reporting	The Mid West Community Healthcare Incident Management Procedure (2018), ensures the safety of everyone who uses its health and social care services and is committed to improving the quality of care to patients, residents and service users, staff and members of the public, through the consistent monitoring and review of incidents which result, or had the potential to result in injury, damage or other loss. Reporting of all accidents and incidents is an integral part of HSE Midwest Community Healthcare's risk identification and risk management approach and it is policy that all incidents are identified, managed, disclosed, reported, investigated and steps are put in place, where possible, to prevent a recurrence in line with the HSE Incident Management Framework (2020). MWCH Oral Health Services has implemented this procedure throughout its services. As an addendum to this procedure, the EPAORP and HIQA as an external agency for notification in the event of an Ionising Radiation incident have been added. The actions front line staff and managers must adhere to are outlined in Oral Health Services Ionising Radiation Protection Management and Everyday Practice Guideline. The MWCH Oral Health Services IRPC have approved the process for the reporting and management of Ionising Radiation incidents in MWCH Oral Health Services and monitors, reviews and advises on Ionising Radiation Incidents.
Risk Management	The MWCH Oral Health Services with the MPE/RPA recognises the importance of adopting a proactive approach to the management of the risks associated with ionising radiation in order to protect service users, staff and the public. The purpose of risk assessment in ionising radiation is to identify the protective measures needed to restrict exposures to radiation. A risk assessment is carried out for each piece of radiological equipment in each site by the Designated Manager/RPO and the MPE/RPA prior to acquiring X-ray equipment. This supports both the achievement of objectives and compliance with governance requirements. The MWCH Oral Health Services is committed to ensuring the risks identified are seen as the concern of everyone and are embedded as part of normal day to day business and inform the strategic and operational planning and performance

cycle.

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Healthcare Waste Management	Healthcare waste is defined as solid or liquid waste arising from healthcare or health related facilities. There are two categories of waste- Non-Risk Waste and Health Care Risk Waste (HCRW) each of which must be segregated and disposed of separately. The MWCH Oral Health Services Designated Manager/RPO is responsible for arranging the safe segregation, storage, collection and disposal of HCRW, thereby protecting patients, staff and public.
Audit	The MWCH Oral Health Services conducts clinical audits on ionising radiation in line with guidance provide by the Dental Council, National Radiation Protection Committee, HIQA and EPA. Management and governance structures for clinical audit are in place. Protected time and the resources to carry out clinical audits including implementation of improvements and re-audit are in place. A register of all clinical audits is maintained on an audit schedule. There is a clear process in place for the submission, prioritisation, approval, and registration of clinical audits. The following factors are considered when prioritising: • External priorities, such as those highlighted by the outputs of NRPC, and those based on Health Information and Quality Authority (HIQA) standards • Internal priorities based on clinical risks, serious incidents and patient safety • Organisational priorities, including service redesign and development • Departmental, unit, specialty, or professional priority, for example, for professional revalidation, appraisal, and training needs. Clinical audits are reviewed by the IRPC. Completed local clinical audits are widely disseminated for the purposes of transparency, at education and staff meetings. The governance of clinical audit is aligned with the HSE governance for quality and safety.
Infection Prevention and Control	The MWCH Oral Health Services have adopted the HSE National Guideline for Infection Prevention and Control in HSE Dental and Orthodontic Services 2020. National guidance from the Government, HSA, HSPC, AMRIC, HIQA, and Dental Council for the protection of the service users, staff and members of the public during the COVID 19 pandemic are integrated into the management of the service and every day practice.

EPA Office of Radiological Protection	All practices involving exposure of individuals to ionising radiation are subject to authorisation by the EPA Office of Radiological Protection (formerly the Radiological Protection Institute of Ireland (RPII). A copy of the current authorisation is on public display in each clinic.
Security	Radiological equipment when left unattended is secured in a locked room to ensure that unauthorised use of the equipment is not possible. Chemical used in the development of x-rays are subject to the health and safety requirements of being in a secured cupboard in a secured room. The safe storage and use of healthcare records is compliant with the General Data Protection Regulations (GDPR).
Chemicals	A chemical register is available at each MWCH oral health services site which includes a risk assessment for each chemical, safety data sheets are available, staff have been briefed on their safe use, storage and disposal. Chemicals used in the development of x-rays are subject to the segregation, storage, collection and disposal of health care risk waste as outlined.
Emergency Procedures	In the event of an emergency or malfunction of radiographic equipment, the equipment must be turned off at the isolation switch.

1.5 ROLES AND RESPONSIBILITIES

See Appendix III.

1.6 LIST OF APPENDICES

Appendix I Signature Sheet.

Appendix II Glossary of Abbreviations, Terms and Definitions.

Appendix III Roles and Responsibilities.

Appendix IV MWCH Oral Health Services Ionising Radiation Protection Committee Terms of Reference.

Appendix \boldsymbol{V} MWCH Primary Care Quality and Safety Governance.

APPENDIX I: SIGNATURE SHEET

I have read, understand and agree to adhere to the Mid West Community Healthcare, Oral Health Services, Ionising Radiation Protection Policy Part 1:

Print Name	Signature	Area of Work	Date

APPENDIX II: GLOSSARY OF ABBREVIATIONS, TERMS AND DEFINITIONS

Abbreviation	
ALADAIP	As Low As Diagnostically Achievable being Indication-oriented and Patient-specific
AMRIC	Antimicrobial Resistance and Infection and Control Division
BSS	Basic Safety Standard
СТ	Computed Tomography
DRL	Diagnostic Reference Level
EURATOM	European Atomic Energy Community Treaty
HIQA	Health Information and Quality Authority
HPRA	Health Products Regulatory Authority
HSA	Health and Safety Authority
HSE	Health Service Executive
HSPC	Health Protection Surveillance Centre
ICRP	International Commission for Radiological Protection
IRPC	Ionising Radiation Protection Committee
kV	Kilovolt
MED	Medical Exposure Directive
MERU	Medical Exposure Radiation Unit
mGy	Miligray
MPE	Medical Physics Expert
mSv	Millisievert
NIMS	National Incident Management System
NOHO, HSE	National Oral Health Office, HSE
NRPC, HSE	National Radiation Protection Committee , HSE
NRPO, HSE	National Radiation Protection Office , HSE
NRSC	National Radiation Safety Committee
OPG/DPT	Orthopantomogram or also known as Dental Panoramic Tomograph
ORPEM/EPA	Office of Radiological Protection and Environmental Monitoring of the Environmental Protection Agency
RCSI	Royal College of Surgeons Ireland
RPA	Radiation Protection Advisor
RPO	Radiation Protection Officer
RSO	Radiation Safety Officers
SI	Statutory Instrument

TERM	DEFINITION	REFERENCE
Accountability	Being answerable to another person or organisation for decisions, behaviour and any consequences.	HSE Incident Management Framework- Guidance 2020.
Authority	In the regulations, HIQA is defined as the competent authority for regulating medical exposure to ionising radiation in Ireland. The regulations extend HIQA's role and regulatory powers to include public and private radiological, radiotherapy, nuclear medicine, and dental installations. HIQA's remit also extends to medical exposures to ionising radiation incurred by carers and comforters, and by volunteers in medical or biomedical research.	2018 EUROPEAN UNION (BASIC SAFETY STANDARDS FOR PROTECTION
	In related but separate legislation, the Environmental Protection Agency (EPA) Office of Radiation Protection and Environmental Monitoring is designated as the competent authority with responsibility for occupational and public exposures to ionising radiation.	RADIOLOGICAL
Authorisation	The registration or licensing of a practice.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Carer and comforter	Individuals knowingly and willingly incurring an exposure to ionising radiation by helping, other than as part of their occupation, in the support and comfort of individuals undergoing or having undergone medical exposure.	2019 RADIOLOGICAL

Clinical Responsibility	Responsibility of a practitioner for individual medical exposures, in particular, justification; optimisation; clinical evaluation of the outcome; cooperation with other specialists and staff, as appropriate, regarding practical aspects of medical radiological procedures; obtaining information, if appropriate, on previous examinations; providing existing medical radiological information or records to other practitioners or the referrer, as required; and giving information on the risk of ionising radiation to patients and other individuals involved, as appropriate.	2018 EUROPEAN UNION (BASIC SAFETY STANDARDS FOR PROTECTION AGAINST DANGERS
Compliance Notice	A notice served pursuant to Regulation 26; Where an authorised person is of the opinion that there is non-compliance with a requirement of SI 256 of 2018 Regulations, the authorised person may, following consultation with the Chief Executive Officer of the Authority or another officer of the Authority designated for that purpose, serve, or arrange to have served, on the undertaking or other person concerned a notice ("compliance notice") in accordance with Regulation 26, paragraph (2) of SI 256 of 2018.	EUROPEAN UNION (BASIC SAFETY STANDARDS FOR PROTECTION AGAINST
Compliant	A judgment of compliant means the undertaking or other person is in full compliance with the relevant regulation.	
Contamination	The unintended or undesirable presence of radioactive substances on surfaces or within solids, liquids or gases or on the human body.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Controlled area	An area subject to special rules for the purpose of protection against ionising radiation or preventing the spread of radioactive contamination and to which access is controlled.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Delegation	A person or group chosen to represent another or others.	Collins English Dictionary online accessed 20.01.2020.
Delegation/ Sub delegation order	Appropriate legal authority to carry out statutory functions. In the HSE a delegation or sub delegation is to be taken to include the delegation or sub-delegation of any duty or power incidental to or connected with the delegated/sub-delegation function. Any act or thing done by an employee of the HSE pursuant to a delegation/sub-delegation has the same force and effect as if done by the Director General.	Framework and Governance Arrangements,
Diagnostic Reference Levels	Diagnostic reference levels are a benchmark of the typical dose levels for types of radiological and interventional practices. They provide a benchmark to compare doses received by individuals having the same procedures in different rooms, medical installations or organisations. This measurement represents a reference dose level as part of an optimisation process. They are based upon entrance dose surveys.	on the assessment of undertakings providing medical exposure to ionising radiation (2019).

Disposal	In relation to radioactive waste, the emplacement of waste in a repository, or a given location, without the intention of retrieval.	
Disposal facility	Any facility or installation the primary purpose of which is radioactive waste disposal.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Dosimetry	The science by which radiation dose is determined by measurement, calculation, or a combination of measurement and calculation. The technical name for radiation dose is "absorbed dose"; it is the amount of radiation energy that is deposited in tissue divided by the mass of the tissue.	Nuclear Medicine and Molecular Imaging, 2019.
Dose constraints for medical exposure	A constraint set as a prospective upper bound of individual doses, used to define the range of options considered in the process of optimisation for a given radiation source in a planned exposure situation.	RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019 S.I. No. 30 of 2019
Environmental monitoring	The measurement of external dose rates due to radioactive substances in the environment or of concentrations of radionuclides in environmental media.	RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Emergency Exposure Situation	A situation of exposure due to an emergency.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Emergency Occupational Exposure	Exposure received in an emergency exposure situation by an emergency worker.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Emergency Response Plan	Arrangements to plan for adequate response in the event of an emergency exposure situation on the basis of postulated events and related scenarios.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Emergency Worker	Any person having a defined role in an emergency and who might be exposed to radiation while acting in response to the emergency.	
Estimates of population dose	The dose the average adult is likely to receive from dental radiography in a calendar year.	Radiation Doses Received by the Irish Population EPA (2014)
Inspection	An investigation by or on behalf of the Agency to verify compliance with national legal requirements.	
Inspector	A person appointed under Section 28 of the Principal Act to be an inspector for the purposes of that Act and orders or regulations made under it.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Ionising Radiation	Energy transferred in the form of particles or electromagnetic waves of a wavelength of 100 nanometres or less (a frequency of 3 × 1015 hertz or more) capable of producing ions directly or indirectly.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Irradiating Apparatus	An electrical apparatus capable of producing ionising radiation and containing components operating at a potential difference of more than 5kV.	2019
Justification	produces, including the direct benefits to health of an individual and the benefits to society, against the individual detriment that the exposure might cause, and takes into account the efficacy, benefits and	2018

Medical Exposure	Exposure incurred by patients or asymptomatic individuals as part of their own medical or dental diagnosis or treatment, and intended to benefit their health, as well as exposure incurred by carers and comforters and by volunteers in medical or biomedical research.	2018
	Exposure incurred by patients or asymptomatic individuals as part of their own medical or dental diagnosis or treatment, and intended to benefit their health, as well as exposure incurred by carers and comforters and by volunteers in medical or biomedical research.	2019
Medical Physics Expert	An individual having the knowledge, training and experience to act or give advice on matters relating to radiation physics applied to medical exposure, whose competence in this respect is recognised by the Minister pursuant to Regulation 19(2).	
Members of the Public	Individuals who may be subject to public exposure.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Normal exposure	Exposure expected to occur under the normal operating conditions of a facility or human activity (including maintenance, inspection, decommissioning), including minor incidents that can be kept under control during normal operation and anticipated operational occurrences.	
Notification	Submission of information to the Agency to notify the intention to carry out a practice within the scope of these Regulations.	
Not compliant	A judgment of not compliant means the undertaking or other persons has not complied with a regulation and that considerable action is required to come into compliance.	HIQA, Guidance on the assessment of undertakings providing medical exposure to ionising radiation (2019).
Occupational Exposure	Exposure of workers, apprentices, and students, incurred in the course of their work.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Occupational Health Service	A health professional or body competent to perform medical surveillance of exposed workers and whose capacity to act in that respect is recognised by the Agency.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Optimisation	All doses due to medical exposure for radio- diagnostic, interventional radiology, planning, guiding and verification purposes are kept as low as reasonably achievable consistent with obtaining the required medical information, taking into account economic and societal factors.	2018 EUROPEAN UNION (BASIC
Practical aspects of medical radiological procedures	The physical conduct of a medical exposure and any supporting aspects, including handling and use of medical radiological equipment, the assessment of technical and physical parameters (including radiation doses), calibration and maintenance of equipment, preparation and administration of radio-pharmaceuticals, and image processing.	2018 EUROPEAN UNION (BASIC SAFETY

Practitioner /Operator	A person, being a member of one of the classes of persons referred to in Regulation 5, who has clinical responsibility for an individual medical exposure.	S.I. No. 256 of 2018 EUROPEAN UNION (BASIC SAFETY STANDARDS FOR PROTECTION AGAINST DANGERS ARISING FROM MEDICAL EXPOSURE TO IONISING RADIATION) REGULATIONS 2018 S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Practitioner in Charge	The individual to whom the Designated Manager has sub delegated responsibility for radiation protection in a region.	
Protective Measures	Measures, other than remedial measures, for the purpose of avoiding or reducing doses that might otherwise be received in an emergency exposure situation or an existing exposure situation.	2019
Public Exposure	Exposure of individuals, excluding any occupational or medical exposure.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

Quality Assurance	All those planned and systematic actions necessary to provide adequate assurance that a structure, system, component or procedure will perform satisfactorily in compliance with agreed standards. Quality control is a part of quality assurance.	
Quality Control	The set of operations (programming, coordinating, implementing) intended to maintain or to improve quality. It includes monitoring, evaluation and maintenance at required levels of all characteristics of performance of equipment that can be defined, measured, and controlled.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Radiation Protection Advisor	protection advice in order to ensure the effective	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Radiation Protection Officer	An individual who is technically competent in radiation protection matters relevant for a given type of practice to supervise or perform the implementation of the radiation protection arrangements.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Radiological Safety Officer	In each health centre with dental radiographic facilities a named dentist shall be nominated to act as Radiological Safety Officer (RSO). The Radiation Safety Officers shall assist the RPO in carrying out his/her responsibilities. In the Mid-West Oral Health Service each Practitioner/Operator is designated to be a RSO.	for Radiological Practice in Dentistry 1996.

Radiation Safety Procedures	Previously known as Local Rules. For the purpose of enabling work involving ionising radiation to be carried out in accordance with the requirements of the Regulations and, in particular, for the purpose of identifying the manner in which the safety, health and welfare of workers and other persons shall be secured, the undertaking shall, in respect of any controlled area or, where appropriate having regard to the nature of the work carried out there, any supervised area, prepare a statement in writing of such procedures referred to as "radiation safety procedures" it considers ought to be followed.	PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS
Radiation Source	An entity that may cause exposure, such as by emitting ionising radiation or by releasing radioactive material and encompasses radiation generator, radioactive material, radioactive source and radioactive substance.	2019 RADIOLOGICAL
Reference Level	In an emergency exposure situation or in an existing exposure situation, the level of effective dose or equivalent dose or activity concentration above which it is judged inappropriate to allow exposures to occur as a result of that exposure situation, even though it is not a limit that may not be exceeded.	PROTECTION ACT 1991 (IONISING RADIATION)
Referrer	A person, being a member of one of the classes of persons referred to in Regulation 4(1), who is entitled to refer an individual for medical radiological procedures to a practitioner.	2018

Register of Medical Physics Experts	The register established and maintained by the Minister pursuant to Regulation 19(1)(b).	S.I. No. 256 of 2018 EUROPEAN UNION (BASIC SAFETY STANDARDS FOR PROTECTION AGAINST DANGERS ARISING FROM MEDICAL EXPOSURE TO IONISING RADIATION) REGULATIONS 2018
Registered person	A person to whom a registration is for the time being granted.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Registration	Permission granted in a document by the Agency, to carry out a practice in accordance with attached conditions (if any) for this type or class of practice.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Regulatory control	Any form of control or regulation applied to human activities for the enforcement of radiation protection requirements.	
Responsibility	The ability or authority to act or decide on one's own, without supervision.	Collins English Dictionary online accessed 20.01.2020.

Role	A function or office assumed by someone.	Collins English Dictionary online accessed 20.01.2020.
Service Users	Service users include patients, asymptomatic individuals, carers and comforters and volunteers in medical or biomedical research.	
Sievert (Sv)	Is the special name of the unit of equivalent or effective dose. One Sievert is equivalent to one joule per kilogram: 1SV = 1JKG ⁻¹	
Supervised area	An area subject to supervision for the purpose of protection against ionising radiation.	S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019
Substantially compliant	A judgment of substantially compliant means that the undertaking or other person has generally met the requirements of the regulation, but some action is required to be fully compliant.	on the

Undertaking	A person or body who, in the course of a trade, business or other undertaking (other than as an employee), carries out, or engages others to carry out, a medical radiological procedure or the practical aspects of a medical radiological procedure.	2018 EUROPEAN
		S.I. No. 30 of 2019 RADIOLOGICAL PROTECTION ACT 1991 (IONISING RADIATION) REGULATIONS 2019

APPENDIX III: ROLES AND RESPONSIBILITIES

Role	Responsibilities
Undertaking	• The HSE is the registered undertaking with primary legal responsibility for compliance with the Regulations SI 256 Of 2018 (HIQA) and IRR 2019 (EPA).
Undertaking Representative, Chief Officer/ Head of Service	 Provide safe, effective, and person-centred care to service users undergoing medical exposures to ionising radiation. Ensure that there is a clear allocation of responsibility and accountability for radiation protection in the organisation and as such has delegated the responsibilities for lonising Radiation Protection through delegation and sub delegation orders. Ensure clear allocation of responsibilities for the protection of patients, asymptomatic individuals, carers and comforters and volunteers. Ensure that appropriate reviews are carried out to determine whether the optimisation of protection and safety for patients is adequate. Ensure that clinical audits are carried out in accordance with national procedures. Implement and maintain appropriate quality assurance programmes. Ensure that a medical physics expert acts or gives specialist advice, as appropriate, on matters relating to radiation physics. Application for Authorisation (Registration or Licence) has been sub delegated to the Principal Dental Surgeon and the Lead Orthodontist. Ensure that health screening is not carried out unless justified by HIQA. Ensure that asymptomatic patients are either part of a health screening programme or have documented justification with special attention to provision of information.
	 Ensure that asymptomatic patients are either part of a health screening programme or have documented justification with special attention to provision of information.

- Ensure optimisation includes selection of equipment and consistent production of adequate information/outcome.
 Although individual optimisation lies with the practitioner they cannot take full responsibility for economic or societal factors, as the undertaking has authority on the condition and dose saving functions of equipment they provide to the practitioner.
- Ensure that medical / biomedical research is examined and approved by Ethics Committee (as defined in the SI this is one established or recognised under SI 190 (2004)), participate voluntarily and are provided adequate information on risk.
- Establish guidance on the exposure of comforters and carers.
- Ensure DRLs are established and reviewed having regard to NDRLs.
- Ensure that referral guidelines for imaging are available to referrers.
- Ensure that medical radiological equipment is kept under strict surveillance and that appropriate testing is carried out prior to clinical use, after major service and on regular basis and retain records for 5 years.
- Provide HIQA with inventory of equipment on request.
- Ensure steps are taken to minimise the probability accidental or unintended exposures.
- Provide information and records on medical exposures to HIQA to facilitate population doses.
- Ensure arrangements are in place for the continuity of expertise of MPEs.
- Ensure that practitioners and individuals delegated practical aspects; have adequate training and education, undertake continuing education and training.
- Retain records evidencing training for 5 years.
- Where the Agency has specified a condition in a licence, the undertaking shall comply with that condition.
- Safety and management of radioactive waste generated from a practice.
- Ensure that the employment conditions for the pregnant worker are such that the equivalent dose to the unborn child is as low as reasonably achievable and unlikely to exceed 1 mSv during, at least, the remainder of the pregnancy.

- Ensure that dose limits are the sum of annual occupation exposures. The limit to the lens of the eye shall be 20mSv in a single year.
- Assessing and implementing arrangements for protection of exposed workers and outside workers.
- Ensure that exposures are kept ALADAIP and make a risk assessment prior to commencing a practice and keep same under review.
- Ensure that staff are trained in radiation safety and instruction is suitable and sufficient.
- Undertaking shall classify areas as radiation controlled or supervised.

following risk assessment, and keep working conditions under review and consult with the MPE/ RPA.

- Take all reasonable steps to ensure that Cat A workers are medically fit.
- Evaluate the possibility of radiological emergency from each site and prepare an emergency response plan.
- Record and communicate to the HIQA/EPA significant events involving accidental exposure.
- Ensure that risks to staff and members of the public from all activities involving the use of ionising radiation are adequately assessed.
- Delegation of the day today Holder/Undertaking functions for ionising radiation protection to the Designated Manager/RPO who reports directly to the Head of Service.
- Provision of appropriate resources and training to the RPO to effectively carry out his/her responsibilities.
- Ensuring that all doses due to medical exposure for radio diagnostic, interventional radiology, planning, guiding and verification purposes are kept as low as reasonably achievable, optimisation, consistent with obtaining the required medical information, taking into account economic and societal factors. Optimisation includes the selection of equipment, the consistent production of adequate diagnostic information or therapeutic outcomes, the practical aspects of medical radiological procedures, quality assurance, and the assessment and evaluation of patient doses or the verification of administered activities taking into account economic and societal factors and involves the practitioner, the medical physics expert and those entitled to carry out practical aspects of dental radiological procedures.

•	Ensure that the justification process of individual medical exposures involves the practitioner, and the referrer. Ensure the delegation of practical aspects of a medical radiological procedure, as appropriate, to one or more individuals, who are registered or recognised by (i) the Dental Council, (ii) the Minister for Health, (iii) the Nursing and Midwifery Board of Ireland, (iv) the Radiographers Registration Board, or (v) the Medical Council, as appropriate, and have completed a course in radiation safety as prescribed by the appropriate body. Chair the MWCH Oral Health Services Ionising Radiation Protection Committee as per the Terms of Reference, Appendix IV.	
Designated Manager/ Radiation Protection Officer	The day to day Holder/Undertaking functions. Ensure clear allocation of responsibilities for the protection of patients, asymptomatic individuals, carers and comforters and volunteers.	
•	Ensure that appropriate reviews are carried out to determine whether the optimisation of protection and safety for patients is adequate.	
٠	Ensure that clinical audits are carried out in accordance with the audit schedule.	
٠	Implement and maintain the quality assurance programme.	
•	 Ensure that exposures are kept ALADAIP and make a risk assessment prior to installing and commissioning a new x ray machine and keep same under review. Ensure they consult with a medical physics expert for specialist advice, as appropriate, on matters relating to radiation physics. 	
•		
	Application for Authorisation for Oral Health Services.	
	Ensure that radiation safety procedures are in place and reviewed periodically.	
	Consult with a Radiation Protection Adviser.	
•	Ensure that health screening is not carried out unless justified by HIQA.	
•	Ensure that asymptomatic patients are either part of a health screening programme or have documented justification with special attention to provision of information.	
•	Ensure doses are kept ALADAIP taking into account economic and societal factors.	
•	Ensure optimisation includes selection of equipment and consistent production of adequate information/outcome.	

PPPG Title: Mid West Community Healthcare, Oral Health Services Ionising Radiation Protection Policy, Part A1

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- Ensure that medical / biomedical research is examined and approved by Ethics Committee (as defined in the SI this is one established or recognised under SI 190 (2004)), participate voluntarily and are provided adequate information on risk.
- Implement the guidance on the exposure of comforters and carers.
- Ensure DRLs are established and reviewed having regard to NDRLs.
- Ensure that referral guidelines for imaging are available to referrers.
- Ensure that medical radiological equipment is kept under strict surveillance and that appropriate testing is carried out prior to clinical use, after major service and on regular basis and retain records for 5 years.
- Provide HIQA with inventory of equipment on request.
- Ensure steps are taken to minimise the probability of accidental or unintended exposures and adherence to the incident reporting process.
- Provide information and records on dental exposures to HIQA to facilitate population doses.
- Ensure that practitioners and individuals delegated practical aspects; have adequate training and education, undertake continuing education and training.
- Retain records evidencing training for 5 years.
- Where the Agency has specified a condition in a licence, the undertaking shall comply with that condition.
- Ensure safe storage use and disposal of radioactive waste generated from a practice.
- Ensure that the employment conditions for the pregnant worker are such that the equivalent dose to the unborn child is as low as reasonably achievable and unlikely to exceed 1 mSv during, at least, the remainder of the pregnancy.
- Ensure that dose limits are the sum of annual occupation exposures. The limit to the lens of the eye shall be 20mSv in a single year.
- Assessing and implementing arrangements for protection of exposed workers. In the case of outside workers, the undertaking shall record the dose in the radiation passbook at the end of any work activity.

• Ensure that staff are trained in

Mid West Community Healthcare Oral Health Services Ionising Radiation Protection Policy & Mid West Community Healthcare Oral Health Services Ionising Radiation Protection Management and Everyday Practice Guideline.

- Ensure areas are classified as radiation controlled or supervised following risk assessment, and keep working conditions under review and consult with the RPA.
- Take all reasonable steps to ensure that Cat A workers are medically fit.
- Evaluate the possibility of radiological emergency from the practice and prepare an emergency response plan.
- Record and communicate to HIQA/EPA significant events involving accidental exposures.
- Ensure that risks to staff and members of the public from all activities involving the use of ionising radiation are adequately assessed, monitored, managed and communicated/notified to the Head of Service as appropriate.
- Implement the arrangements for the radiation protection of all patients, staff and members of the public.
- Delegation of responsibility for ionising radiation protection to Radiation Safety Officers who shall report directly to the Designated Manager/RPO.
- Provision of appropriate resources and training to the RSOs to effectively carry out his/her responsibilities.
- Seek advice from the MPE/RPA to ensure compliance with IRR19 and SI 256 of 2018.
- Provide the MPE/RPA with access, adequate information and facilities for the discharge of his/her functions.
- Ensure that X-ray equipment is operated only by appropriately trained staff and under the responsibility of a dental practitioner.
- Ensure that X-ray equipment is appropriately installed, commissioned and subject to quality assurance.
- Ensure, where the authorisation covers multiple premises, that local governance arrangements are in place.
- Ensure that documentation relevant to compliance with IRR19 and SI 256 of 2018is maintained and accessible as required.
- Retain records for a period of five years from the date of the medical exposure thereby evidencing compliance with SI 256 2018.

- Ensure that all doses due to medical exposure for radio diagnostic, interventional radiology, planning, guiding and verification purposes are kept as low as reasonably achievable, optimisation, consistent with obtaining the required medical information, taking into account economic and societal factors. Optimisation includes the selection of equipment, the consistent production of adequate diagnostic information or therapeutic outcomes, the practical aspects of medical radiological procedures, quality assurance, and the assessment and evaluation of patient doses or the verification of administered activities taking into account economic and societal factors.
- Ensure that the optimisation process for all medical exposures involves the practitioner, the medical physics expert and those entitled to carry out practical aspects of medical radiological procedures as specified by the undertaking or practitioner.
- Ensure that the justification process of individual medical exposures involves the practitioner, and the referrer.
- Ensure that all medical exposures take place under the clinical responsibility of a practitioner.
- Ensure delegation of practical aspects of a medical radiological procedure, as appropriate, to one or more individuals, who are registered or recognised by (i) the Dental Council, (ii) the Minister for Health, (iii) the Nursing and Midwifery Board of Ireland, (iv) the Radiographers Registration Board, or (v) the Medical Council, as appropriate, and have completed a course in radiation safety as prescribed by the appropriate body.
- Retain a record of each delegation for a period of five years from the date of the delegation and shall provide such records on request.
- Ensure that practical aspects of a dental radiological procedure are not delegated to a person other than an individual referred to as above.
- Ensure that the persons undertake continuing education and training after qualification including, in the case of clinical use of new techniques, training related to these techniques and the relevant radiation protection requirements.
- Ensure that practitioners, and individuals to whom the practical aspects of medical radiological procedures are delegated have adequate education, information and theoretical and practical training for that purpose, as well as relevant competence in radiation protection.

	 Ensure that the workforce is organised and managed in such a way to ensure that those involved in medical exposures have the required skills, experience and competencies to respond to the changing needs of the service. Maintain the RPO authorisation with the EPAORP through the EDEN portal. Maintain the Designated Manager function with HIQA through the HIQA portal system. Attend and provide assurance of ionising radiation protection to the MWCH Oral Health Services Ionising Radiation Protection Committee as per the Terms of Reference, Appendix IV.
The Medical Physics Expert/ Radiation Protection Advisor	• Advise and perform quality assurance activities on dental radiological equipment and reduce the risk to service users, staff, and members of the public from dental exposures to ionising radiation.
	 Dosimetry and physical dose measurements.
	 Advise on medical radiological equipment.
	• Ensure optimisation of the radiation protection of patients and other individuals subject to medical exposure, including the application and use of diagnostic reference levels.
	• Ensure the definition and performance of quality assurance of the dental radiological equipment.
	• Ensure the acceptance testing of medical radiological equipment.
	• The preparation of technical specifications for medical radiological equipment and installation design.
	Surveillance of the medical radiological installations.
	 Analysis of events involving, or potentially involving, accidental or unintended medical exposures – preparation and submission of incident reports.
	• Selection of equipment required to perform radiation protection measurements.
	• Training of practitioners and other staff in relevant aspects of radiation protection.
	• Advising on the use of dosimetry to compare local diagnostic reference levels to national diagnostic reference levels.
	• Preparation or update of risk assessments and additional safety procedures.
	• Estimation of doses to workers and members of the public.
	Classification of areas and categorisation of workers.

	 Quality assurance measures; The MPE/RPA shall conduct a quality assurance of each ionising radiation apparatus at least once during a two year period (or a timeframe agreed by the Radiation Safety Committee), or in cases of increased X-ray workload or the introduction of new X-ray technology. Safety aspects associated with the acquisition of any new X-ray equipment. Commissioning and acceptance into service of new X-ray equipment. Design (including shielding specifications) of any new buildings or facilities. Modifications to any existing X-ray equipment or facilities. Changes to the use of any buildings or adjoining buildings where X-rays are in use. Attend and provide advice on ionising radiation protection to the MWCH Oral Health Services Ionising Radiation Protection Committee as per the Terms of Reference, Appendix IV.
Practitioner/Radiation Safety Officer	 Professionally and legally accountable and responsible for the standards of practice they contribute to; and must work to the Dental Council Code of Practice Professional Behaviour and ethical conduct 2012. Undertake training relevant to the role of Radiation Safety Officer. Follow the policy, guidelines, protocols and procedures as outlined in this document and MWCH OHS IRP Management and Every Day Practice Guideline.
Operators	 Professionally and legally accountable and responsible for the standards of practice they contribute to; and must work to the Dental Council Code of Practice Professional Behaviour and ethical conduct 2012. Follow the policy, guidelines, protocols and procedures as outlined in this document and MWCH OHS IRP Management and Every Day Practice Guideline.
All Staff	• Follow the policy, guidelines, protocols and procedures as outlined in this document and MWCH OHS IRP Management and Every Day Practice Guideline.

APPENDIX IV: HSE MID WEST COMMUNITY HEALTHCARE, (MWCH) ORAL HEALTH SERVICES, IONISING RADIATION PROTECTION COMMITTEE (IRPC)

1.0. Purpose

The MWCH Oral Health Services Ionising Radiation Protection Committee (IRPC) has the responsibility for recommending radiation protection measures to comply with formal national and European requirements to MWCH dental, orthodontic and restorative dentistry services. This is in line with the recommendations of the HSE National Radiation Safety Committee (NRSC).

The committee assists the Radiation Protection Officers/Designated Managers to assess and advise clinical practices and radiation protection procedures and processes to ensure that the exposure and outcome for the patient is in line with international best practice.

The committee provides advice and guidance on issues arising from the legislative obligations placed on it Ionising Radiation Regulations, 2019 (S.I. No. 30 of 2019), hereafter called IRR19, and the Principal Regulations SI 256 of 2018 and subsequent regulations (S.I 332 and 413 of 2019) and are cited together as the European Union (Basic Safety Standards for Protection Against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018 and 2019.

The advice and guidance given by the IRPC is in accordance with the HIQA National Standards for Safer Better Healthcare (2012).

2.0 Membership

Margaret Costello, Head of Service Primary Care, Chairperson. Aisling Finucane, General Manager, Primary Care, Vice Chairperson. Brendan Tuohy, Medical Physics Expert and Radiation Safety Advisor. Dr Maurice Delaney, Principal Dental Surgeon, Designated Manager & Radiation Protection Officer. Dr Caroline Mullane, Lead Orthodontist, Designated Manager & Radiation Protection Officer. Dr Mary Hurley, Senior Dental Surgeon Administrative. Noreen O'Regan, Quality Risk and Safety Advisor to Primary Care. Dr Dominic O'Shea, Consultant in Restorative Dentistry. Tina Gleeson, Secretary to the MWCH Oral Health Services IRPC.

3.0 Responsibilities

- 3.1 Ensuring and monitoring compliance with Ionising Radiation Regulations, 2019 (S.I. No. 30 of 2019), hereafter called IRR19, and the Principal Regulations SI 256 of 2018 and subsequent regulations (S.I 332 and 413 of 2019) and are cited together as the European Union (Basic Safety Standards for Protection Against Dangers Arising from Medical Exposure to Ionising Radiation) Regulations 2018 and 2019.
- 3.2 Ensuring and monitoring compliance with any guidelines or regulations issued by the HSE National Radiation Safety Committee, or the Dental Council and National Oral Health Office.
- 3.3 Monitoring Risks and Incidents.
- 3.4 Monitoring quality assurance programmes.
- 3.5 Reviewing and prioritising clinical audit.
- 3.6 Monitoring equipment, maintenance and replacement criteria.
- 3.7 Monitoring Staff education and training
- 3.8 Monitoring patient and staff dose reference levels.
- 3.9 Set out the systems and processes that are required to ensure that ionising radiation is managed consistently across the MWCH Oral Health Services.
- 3.10 Producing an annual work plan and annual report to the MWCH Primary Care Quality and Safety Committee.
- 3.11 Any other relevant matters that may arise.

4.0 Governance

- 4.1 If a member cannot attend, apologies should be sent with rationale and this will be recorded in the minutes. Members not attending 3 consecutive meetings will be formally communicated with to review their membership.
- 4.2 In the event of non-attendance by the chair then the vice chair will chair the meeting, the chair or vice chair should attend all meetings.
- 4.3 Attendance by Non-Members:

In the event where the member of the committee cannot attend a suitable deputy may attend. From time to time others may attend to provide expert advice as deemed necessary.

4.4 Frequency of Meetings

The Committee shall meet at least 2 monthly with 2 meetings in person and 2 meetings by teleconference at a time to be agreed by the members.

Frequency of meetings: quarterly.

4.5 The Secretary is appointed to the Committee and is to be responsible for arrangement of meetings, timely circulation of minutes, agenda and other documents.

PPPG Title: Mid West Community Healthcare, Oral Health Services Ionising Radiation Protection Policy, Part A1 PPPG Reference Number: MW-PC-PPPG-C-MD-01 Version No: 0 Approval Date: 18/02/2021 Revision Date: 18/02/2024

4.6 The Secretary circulates the Agenda and any required documentation two weeks in advance of meetings.

The Agenda will follow a defined format:

- 1. Apologies.
- 2. Minutes.
- 3. Matters Arising.
- 4. Recent communications from internal agencies and external Professional and regulatory bodies.
- 5. MWCH Oral Health Services Ionising Radiation Policy with associated PPPG's.
- 6. Quality Assurance Program & Registration with EPA.
- 7. Audit Schedule.

Audit Scope	Scheduled	Person Responsible
EDEN registration with EPA		
Quality Assurance Program.		
Patient Dose.		
Dose constraints.		
Professional registration		
and delegation		
Training		
Justification		
Referrals		
Optimization		
PPPG's for each standard exposure		
Image Quality Audit		
Image interpretation		
Rejects and Repeats log		
Processing		
Audits to demonstrate practice		
with children (HIQA reports)		
Risk Management		
Incident Management		

- 8. Risk Management.
- 9. Incident Management.
- 10. Service User Feedback.
- 11. Any other business.

PPPG Title: Mid West Community Healthcare, Oral Health Services Ionising Radiation Protection Policy, Part A1 PPPG Reference Number: MW-PC-PPPG-C-MD-01 Version No: 0 Approval Date: 18/02/2021 Revision Date: 18/02/2024

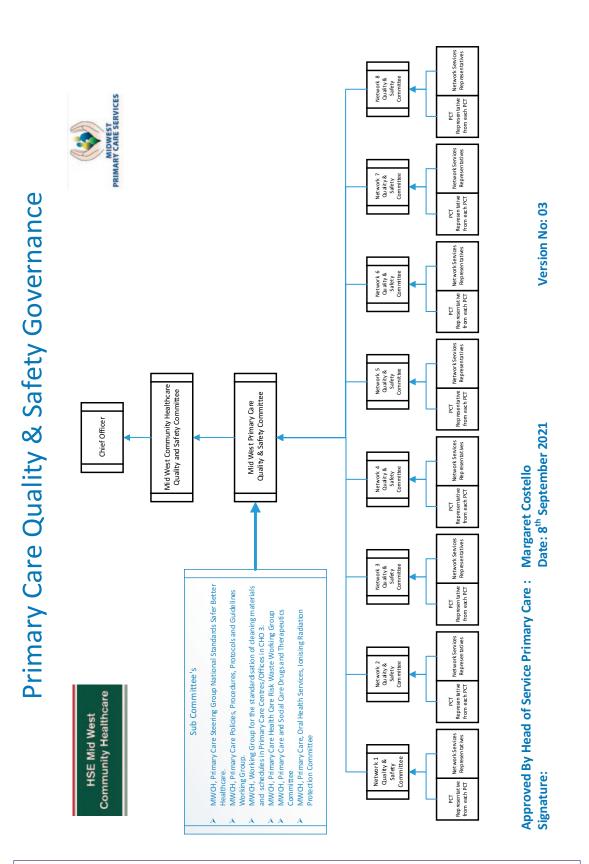
4.7 Decision Making Process

- 4.7.1 A quorum will consist of each discipline to be present.
- 4.7.2 Decisions will be by consensus.
- 4.7.3 Under exceptional circumstances where a decision of the committee is required as a matter of urgency, between scheduled meetings, the Chairperson will call an unscheduled meeting.

5.0 Review:

The MWCH Oral Health Services Ionising Radiation Protection Committee will review these terms of reference every 12 months.

Name	Role	Signature
Margaret Costello,	Head of Service Primary Care,	
	Chairperson.	
Aisling Finucane,	General Manager, Primary Care,	
	Vice Chairperson.	
Brendan Tuohy,	Medical Physics Expert and	
	Radiation Safety Advisor.	
Dr Maurice Delaney,	Principal Dental Surgeon	
	Designated Manager & Radiation	
	Protection Officer.	
Dr Caroline Mullane,	Lead Orthodontist, Designated	
	Manager & Radiation Protection Officer.	
Dr Mary Hurley,	Senior Dental Surgeon Administrative.	
Noreen O'Regan,	Quality Risk and Safety	
	Advisor to Primary Care.	
Dr Dominic O'Shea,	Consultant in Restorative Dentistry.	
Tina Gleeson	Secretary to the MWCH	
	Oral Health Services IRPC.	



APPENDIX V: MWCH PRIMARY CARE QUALITY & SAFETY GOVERNANCE





Our Services:

- Primary Care
- Mental Health
- Older Persons
- Disabilities
- Health & Wellbeing

HSE Mid West Community Healthcare delivers its services to people in local communities, as close as possible to people's homes