



Western Health
and Social Care Trust

POLICY FOR THE SAFE USE OF IONISING & NON-IONISING RADIATION (RADIATION SAFETY POLICY)

March 2021

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| Title | The Safe Use Of Ionising and Non-Ionising Radiation Policy |
| Reference Number | Acute11/002 |
| Original Implementation Date | April 2011 |
| Revised Dates | February 2016 February 2017 March 2018 March 2021 |
| Review Date | September 2023 |
| Responsible Officer | Chair of Radiation Safety Committee |

- The Trust will ensure, as far as reasonably practicable, the health and safety of its employees, contractors working on the premises, the public, and any other persons who may be exposed to the hazards arising from the use of ionising and non-ionising radiation.
- The overall responsibility for ensuring compliance with the Trust's Radiation Safety Policy lies with the Medical Director who is the employer for the purposes of compliance with radiation safety legislation. The Medical Director nominates the chair of the Radiation Protection Working Group, working via the relevant subgroups in diagnostic imaging and radiotherapy, to manage any areas of non-compliance and ensure that the Trust updates the policy in line with changes in legislation. The legislation referred to by this documents, includes, but is not limited to:

Ionising Radiation Legislation

- The Ionising Radiation (Medical Exposure) Regulations (Northern Ireland) 2018 – IR(ME)R, 2018
- The Ionising Radiations Regulations (Northern Ireland) 2017 – IRR, 2017
- The Radioactive Substances Act 1993 (Amendment) Regulations (Northern Ireland) 2011 – RSA, 2011.

Non-Ionising Radiation Legislation

- Control of Artificial Optical Radiation at Work Regulations (NI) 2010.
- Control of Electromagnetic Fields at Work Regulations (NI) 2016.
- The Trust will ensure that staff and public are protected from the hazards of ionising and non-ionising radiation so far as reasonably practicable, through a hierarchy of radiation protection, including sets of local rules which staff must adhere to. The Trust will ensure that persons undergoing medical exposures are protected from the hazards of ionising and non-ionising radiation so far as reasonably practicable, through a framework of procedures for medical exposures. Employer's Procedures will be maintained for exposure to ionising radiation as required by the Ionising Radiation (Medical Exposures) Regulations (NI) 2018. Separate procedures are maintained for different radiation services (e.g. for diagnostic imaging and radiotherapy).
- All staff must receive appropriate information, instruction and training relating to work with both ionising and non-ionising radiation to ensure the health and safety of themselves and other persons so far as reasonably practicable.
- Staff entitled to act as IR(ME)R Duty Holders are identified through specific Employer's Procedures. These procedures ensure that practitioners and operators are adequately trained to perform the tasks defined within their scope of practice and where appropriate, check relevant qualifications, registration and licensing.
- The Trust appoints a range of certified advisers and experts to provide advice on the requirements of legislation and guidance regarding the safe use of radiation. These include: Radiation Protection Adviser, Radioactive Waste Adviser, Medical

Physics Experts, Laser Protection Advisers and Magnetic Resonance Safety Experts (**RPA, RWA, MPE, LPA** and **MRSE**).

- In diagnostic imaging and nuclear medicine, the Trust utilises the services of MPEs from the Belfast Trust's Regional Medical Physics Service (**RMPS**) with specific scopes of practice in Diagnostic Radiography, Nuclear Medicine and Mammography.
- In radiotherapy, the Trust employs MPEs directly to be closely involved in the optimisation of radiotherapeutic exposures. One or more MPEs must be available for consultation in order for radiotherapy to be delivered.
- The Trust utilises the services of RPA, RWA, LPA and MRSE from the Belfast Trust's Regional Medical Physics Service.
- The Trust and its managers will maintain good communications and cooperation with the RPA, RWA, MPE, LPA and MRSE, and give them adequate information and facilities for the performance of their functions. RPA, RWA, MPE, LPA and MRSE are expected to bring to the attention of the Radiation Protection Working Group and/or the relevant subgroups and local managers any matters within their area of expertise, where the performance of radiation equipment or procedures is not in keeping with this policy.
- Within each department where ionising radiation is used, at least one Radiation Protection Supervisor (**RPS**) is appointed and similarly within each department where Class 3B and Class 4 lasers are used, a Laser Protection Supervisor (**LPS**) is appointed. In their capacity, these supervisors will assist the Trust to comply with the legislative requirements, in particular, they are responsible for ensuring on a day-to-day basis, that work with radiation is carried out safely and in compliance with the applicable Local Rules, and that they have the authority necessary to satisfactorily discharge these duties. They also ensure that the applicable and current Local Rules are available within each department.
- Within each MRI department, the Trust appoints an MR Responsible Person who has day-to-day responsibility of MRI safety. The MR Responsible Person ensures that appropriate and up-to-date Local Rules are available within their MRI department.
- For research projects involving the exposure of persons to ionising radiation the advice of the appropriate MPE must be obtained prior to applications being submitted to the online Integrated Research Application System (IRAS). Arrangements are detailed in the applicable Employer's Procedures. Note that for research projects involving radiotherapy and diagnostic imaging both sets of Employer's Procedures may apply. When undertaking research projects the RPA must be consulted as appropriate regarding the radiation safety of equipment and the overall radiation protection of members of staff and the general public.

- Any adverse incidents involving ionising or non-ionising radiation will be reported in accordance with Trust policy, in addition to any statutory requirements. Adverse incidents must be reported to the applicable professionals for advice (i.e. RPA, RWA, MPE, LPA or MRSE) as soon as possible after the event and recorded in Datix.
- The Trust will notify the appropriate authority and co-ordinate an investigation of incidents where it knows, or it has reason to believe, that an accidental or unintended exposure has, or may have, occurred in which a person:
 - a. was, or may have been, exposed to levels of ionising radiation significantly greater than those generally considered to be proportionate in the circumstances; or
 - b. in the case of a radiotherapeutic exposure was, or may have been, exposed to levels of ionising radiation significantly lower than those generally considered to be proportionate in the circumstances.

The MPE, or RPA if necessary, must be consulted and will be expected to contribute to the investigation report, including dose estimation as required

Where an occupational exposure exceeds the diagnostic or radiotherapy locally defined dose investigation level, as set out in the applicable Local Rules, the Trust will investigate. The trust will notify the appropriate authority and co-ordinate investigation of incidents where it knows, or has reason to believe, that an accidental or unintended exposure has, or may have, occurred.

- For incidents reportable under The Ionising Radiations Regulations (Northern Ireland) 2017 the enforcing authority is The Health and Safety Executive for Northern Ireland (HSENI).
- For incidents reportable under The Ionising Radiation (Medical Exposure) Regulations 2018 the enforcing authority is The Regulation and Quality Improvement Authority (RQIA).
- For incidents reportable under The Radioactive Substances Act 1993 (Amendment) Regulations (Northern Ireland) 2011, the enforcing authority is the Northern Ireland Environment Agency (NIEA)
- All referrers for exposures to ionising radiation are given the Trust's referral criteria, including radiation doses, so that that they are aware of their responsibility to provide adequate patient medical information and demographics.
- Under IR(ME)R 2018, for every nuclear medicine procedure; diagnostic, therapeutic or research; both a valid site licence and practitioner licence is required.
- A "Competent Person" will be appointed to have management responsibility for radioactive sources, as required by the NIEA.

- Other radiation employers with employees working on the Trust's Sites are expected to follow the principles of this policy and put in place appropriate safety structures including the appointment of their own protection supervisors and protection advisers.
- When staff of other employers are working in areas for which the Western Trust has direct responsibility then such staff must abide by this policy.
- The Trust will maintain an inventory of all radiation equipment. Before purchasing or the use of on-loan equipment, the appropriate **RPA, RWA, MPE, MRSE** or **LPA** must be consulted. Where the IR(ME)R Regulations apply, this inventory must include the following information:
 - a. Name of manufacturer
 - b. Model number
 - c. Serial number or other unique identifier
 - d. Year of manufacture, and
 - e. Year of Installation.
- The procurement, commissioning and management of radiation equipment is undertaken in consultation with the relevant MPE and/or RPA which may include preparation of technical specifications and installation design and advice and input on equipment selection.
- The Trust will ensure that risk assessments are performed for all activities involving the use of ionising and non-ionising equipment covered by this policy.
- Quality assurance programmes will be established for all items of radiation generating and measurement equipment under the guidance of the appropriate RPA, MPE, LPA or MRSE.

EQUALITY STATEMENT

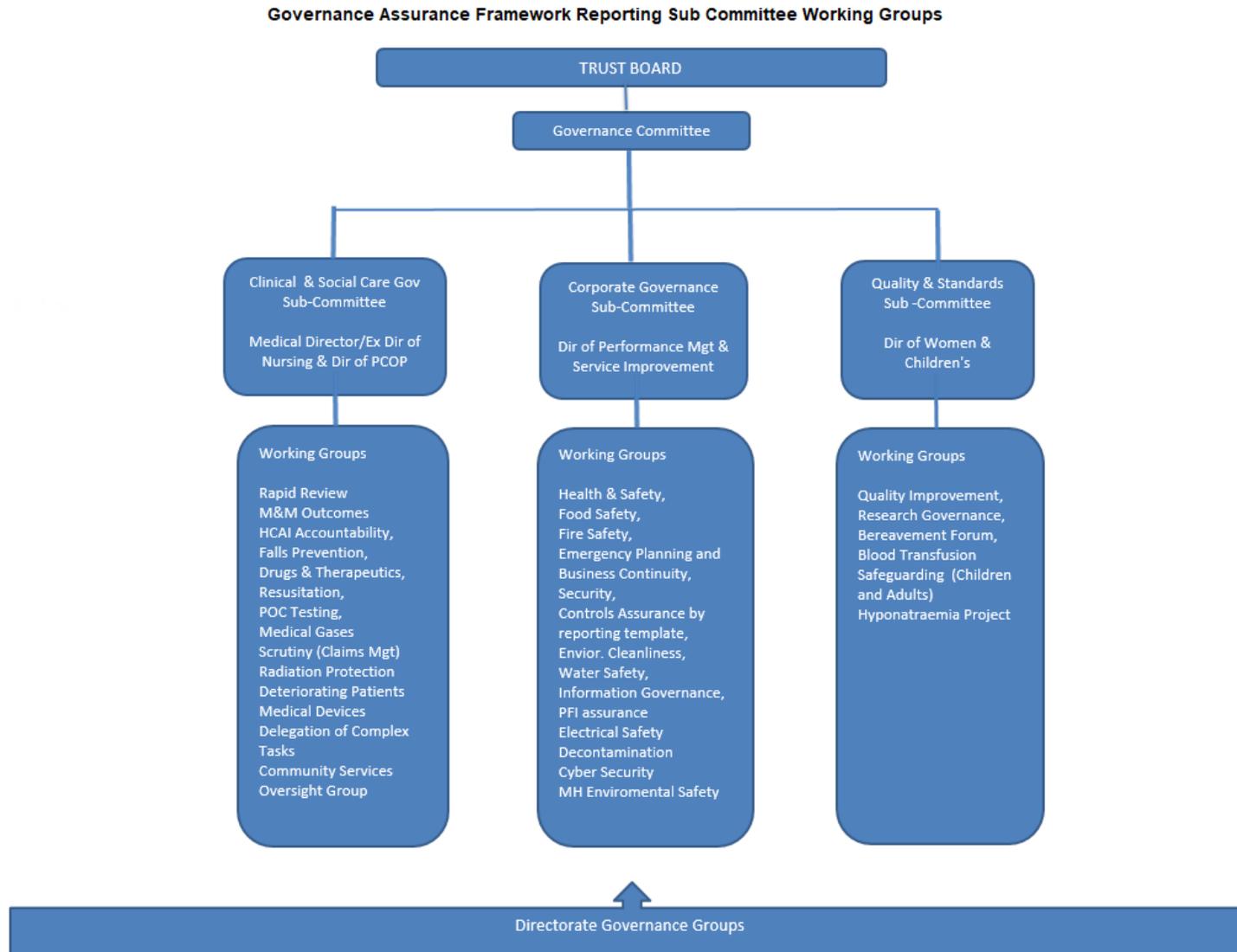
In line with duties under the equality legislation (Section 75 of the Northern Ireland Act 1998), Targeting Social Need Initiative, Disability discrimination and the Human Rights Act 1998, an initial screening exercise to ascertain if this guidance should be subject to a full impact assessment has been carried out. The outcome of the Equality screening for this guidance is:

Major impact

Minor impact

No impact.

Governance Reporting Structure 2020 - Western Health and Social Care Trust



Version Control

| Ver | Date | Page | Changes | Author |
|-----|------------|----------------|---|------------------------------|
| 1 | Feb 2011 | | Original Doc | A McGrath |
| 1.1 | April 2011 | 3 3 | Amendments post Radiation Working Group. CE Titles added. Non Ionising radiation added including Laser Protection Adviser Typos corrected | A McGrath |
| 1.2 | Nov 2012 | 5 | Radiation Waste Adviser added | D McLaughlin (IG) |
| 1.3 | Dec 2012 | 3 | Category of Lasers added Class 3B and Class 4 lasers | D McLaughlin (PL) |
| | Mar 2013 | 6 | Governance structure updated | D McLaughlin |
| 2.0 | Feb 2016 | 2 | Signatories updated Review date amended | D McLaughlin |
| 3.0 | Aug 2017 | All 2 | Updated to incorporate new radiotherapy service. Signatories updated. | A Reilly & D McLaughlin |
| 4.0 | Mar 2018 | 3,4,5 | Updated to incorporate new legislation Addition of MPE and MRSE | A Reilly & D McLaughlin |
| 5.0 | March 2021 | 2,3,4, 5, 6 | Updated legislation referenced, Updated notification guidelines, Removed reference to ARSAC certification to reflect IR(ME)R 2018, Included IR(ME)R Equipment Inventory Requirements. Updated governance reporting arrangements | R Lally, A Reilly & T Mclvor |