References

The accuracy, quality and relevance of these works are not guaranteed or uniform and more recent information may have superseded these works. This list is not exhaustive. It does not include all the resources that may be relevant to service users. It is the responsibility of service users to identify the best available evidence relevant to their practice.

2. Recommendations of International Commission for Radiological Protection (ICRP 60), 1990
10. SI 218 Pregnant Employees Regulations, 2000
11. Radiological Protection (Amendment) Act No 3 of 2002
20. Requirements for Clinical Audit in Medical Radiological Practices (Diagnostic Radiology, Radiotherapy and Nuclear Medicine), HSE and Faculty of Radiologists, 2011
21. The Use of Lead Aprons in Dental Radiology - Joint position statement by the RPII and HSE., 2011
22. Guidelines on the protection of the unborn child during diagnostic medical exposures (RPII), 2010
25. Radiation Doses Received by the Irish Population (RPII), 2008
26. Code of Practice on the Design of Diagnostic Medical Facilities where Ionising Radiation is used (RPII), 2009
27. Requirements for reporting incidents to the RPII – Document no 13/03 RPII, 2003
30. Licensing requirements for ionising radiation equipment, RPII
33. Guidelines for Reporting and Learning from Patient Safety Incidents from Medical Ionising Radiation. HSE, NRSC, 2010
34. Root causes Analysis Fishbone Diagram Tool. NHS, 2010
38. Requirements for Clinical Audit in Medical Radiological Practices (Diagnostic Radiology, Radiotherapy and Nuclear Medicine) HSE And Faculty of Radiologists, 2011
40. Preliminary Results, Population Dose PET_CT. HSE MERU, 2013
42. Guidance on Diagnostic Reference Levels in Nuclear Medicine. ARSAC.
43. Information on Patient Radiation doses Ireland HSE. MERU 2013
44. Recommendations of the ICRP , Publication 103, 2007
45. Patient Dose Information, Public Health England
APPENDIX I

List of stakeholders consulted with on the Patient Radiation Protection Manual and members of the Medical Exposure Radiation Unit

Stakeholders:

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Role/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr Adrian Brady</td>
<td>Dean, Faculty of Radiologists/Prof of Radiology NUI Galway, Member of NACMET and NIMIS.</td>
</tr>
<tr>
<td>Mr Shane Foley</td>
<td>President, Irish Institute of Radiography and Radiation Therapy</td>
</tr>
<tr>
<td>Mr Fintan Bradley</td>
<td>Irish Association of Physicists in Medicine Limited (IAPM)</td>
</tr>
<tr>
<td>Dr Tracey Cooper</td>
<td>Health Information Quality Authority (HIQA)</td>
</tr>
<tr>
<td>Mr Derek Greene</td>
<td>Radiation Safety Advisory Group, Voluntary Hospitals Risk Management Forum</td>
</tr>
<tr>
<td>Dr. Tom Ryan</td>
<td>Regulatory Director, Radiological Protection Institute of Ireland (RPPI)</td>
</tr>
<tr>
<td>Ms Caroline Spillane</td>
<td>CEO, Medical Council</td>
</tr>
<tr>
<td>Mr David O’Flynn</td>
<td>Chief Officer and Registrar, Dental Council</td>
</tr>
<tr>
<td>Mr Fintan Hourihan</td>
<td>CEO, Irish Dental Association</td>
</tr>
<tr>
<td>Ms Edwina Dunne</td>
<td>Head of Health Care Audit, Quality Safety and Risk, HSE</td>
</tr>
<tr>
<td>Mr Michael Shannon</td>
<td>Area Director, Dublin Mid-Leinster, Nursing and Midwifery Planning and Development, HSE</td>
</tr>
<tr>
<td>Dr. Niall Sheehy</td>
<td>Clinical Lead, National Radiology Programme, HSE</td>
</tr>
<tr>
<td>Dr. Patricia Cunningham</td>
<td>Chair, Radiation Protection Committee, Faculty of Radiologists</td>
</tr>
<tr>
<td>Mr John Keegan</td>
<td>Department of Health</td>
</tr>
<tr>
<td>Ms Juliet Kelly</td>
<td>Network Lead Radiation Therapy, National Cancer Control Programme, HSE</td>
</tr>
<tr>
<td>Dr Ronan McDermott</td>
<td>Chairman, Irish Nuclear Medicine Association</td>
</tr>
<tr>
<td>Ms Ann Dolan</td>
<td>Radiography Services Managers Group</td>
</tr>
</tbody>
</table>

Members of the Medical Exposure Radiation Unit developed the guidance document and the National Radiation Safety Committee provided advice and direction.

Membership, Medical Exposure Radiation Unit:

<table>
<thead>
<tr>
<th>Member</th>
<th>Role/Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ms Ciara Norton</td>
<td>Manager</td>
</tr>
<tr>
<td>Ms Rachel Brennan</td>
<td>Administrator</td>
</tr>
<tr>
<td>Ms Bernadette Moran</td>
<td>Radiographic Advisor</td>
</tr>
<tr>
<td>Ms Mandy Lewis</td>
<td>Medical Physics Advisor</td>
</tr>
<tr>
<td>Dr Andrew Bolas</td>
<td>Dental Advisor</td>
</tr>
<tr>
<td>Dr Neil O’Donovan</td>
<td>Radiologist Advisor</td>
</tr>
<tr>
<td>Dr Peter Finnegan</td>
<td>Specialist Public Health Medicine</td>
</tr>
<tr>
<td>Mr Martin Sheridan</td>
<td>Radiotherapy Medical Physics Advisor</td>
</tr>
</tbody>
</table>
APPENDIX II

Glossary of definitions as defined in SI 478 (2002) and SI 303 (2007)

- **Clinical audit** means a systematic examination or review of medical radiological procedures which seeks to improve the quality and the outcome of patient care through structured review whereby radiological practices, procedures and results are examined against agreed standards for good medical radiological procedures, with modification of practices where indicated and the application of new standards if necessary.

- **Clinical responsibility** means responsibility regarding individual medical exposures attributed to a practitioner, notably: justification; optimisation; clinical evaluation of the outcome; co-operation with other specialists and the staff, as appropriate, regarding practical aspects; obtaining information, if appropriate, of previous examinations; providing existing radiological information and/or records to other Practitioners and/or Referrers, as required; giving information on the risk of ionising radiation to patients and other individuals involved, as appropriate.

- **Competent authority** means the Minister for Health and Children.

- **Diagnostic reference levels** means dose levels in medical radio diagnostic practices or, in the case of radio-pharmaceuticals, levels of administered activity for typical examination for groups of standard-sized patients or standard phantoms for broadly defined types of equipment. These levels are expected not to be exceeded for standard procedures when good and normal practice regarding diagnostic and technical performance is applied.”

- **Dose constraint** means a restriction on the prospective doses to individuals which may result from a defined source, for use at the planning stage in radiation protection whenever optimisation is involved.

- **Exposure** means the process of being exposed to ionising radiation.

- **Health screening** means a procedure using radiological installations for early diagnosis in population groups at risk.

- **Holder** means any natural or legal person who has the legal responsibility under national law for a radiological installation.

- **Medical exposure** means exposure of an individual to ionizing radiation for any of the purposes specified in regulation 4.

- **Medical physicist** means an expert in radiation physics or radiation technology applied to exposure, whose training and competence to act is recognised by the competent authority, and who, as appropriate, acts or gives advice on patient dosimetry, on the development and use of complex techniques and equipment, on optimisation, on quality assurance, including quality control, and on other matters relating to radiation protection, concerning exposure.
- Medical radiological procedure means any radio diagnostic or radio therapeutic procedure involving the use of ionising radiation on an individual for medical purposes.

- Medico legal procedures mean procedures performed for insurance or legal purposes without a medical indication.

- Occupational health surveillance means the medical surveillance of workers.

- Patient dosimetry means the dosimetry concerning patients or other individuals undergoing medical exposure.

- Practical aspects means the physical conduct of a medical exposure and any supporting aspects including handling and use of radiological equipment, and the assessment of technical and physical parameters including radiation doses, calibration and maintenance of equipment, preparation and administration of radio-pharmaceuticals and the development of films.

- Practitioner means:­
  - a person whose name is entered on the register established under Section 26 of the Medical Practitioners Act, 1978 and who meets such other requirements as may be specified by the Medical Council from time to time to allow them to take responsibility for an individual medical exposure; or
  - a person whose name is entered on the register established under Section 26 of the Dentists Act, 1985 and who meets such other requirements as may be specified by the Dental Council from time to time to allow them to take responsibility for an individual medical exposure; or
  - a person whose name is entered on such other register or registers as the Minister may, from time to time, establish in relation to persons who are entitled to take clinical responsibility for an individual medical exposure and who meets such other requirements as the Minister may prescribe.

- Practitioner in charge means a practitioner who has been appointed by the holder to be the person in charge of an installation.

- Prescriber/Referrer means
  - a person whose name is entered on the register established under Section 26 of the Medical Practitioners Act, 1978; or
  - a person whose name is entered on the register established under Section 26 of the Dentists Act, 1985; or
  - a person whose name is entered on such other register or registers as the Minister may, from time to time, establish in relation to persons who are entitled to refer individuals for medical exposure to a practitioner and who meets such other requirements as the Minister may prescribe from time to time; or
  - a person whose name is entered on the register of nurses as maintained by An Bord Altranais established by the Nurses Act 1985 and who meets the standards and requirements set down by An Bord Altranais from time to time to allow them to refer individuals for medical exposures to a practitioner.
Quality assurance means all those planned and systematic actions necessary to provide adequate confidence that a structure, system, component or procedure will perform satisfactorily and comply with agreed standards.

Quality control means the set of operations (programming, co-ordinating, implementing) intended to maintain or to improve quality. It covers monitoring, evaluation and maintenance at required levels of all characteristics of performance of equipment that can be defined, measured, and controlled.

Radiographer means a person who has successfully completed an approved course of training for that category of persons and who is qualified to be employed as a radiographer by a health board.

Radiological means pertaining to radio diagnostic and radio therapeutic procedures, and intervention radiology or other planning and guiding radiology.

Radiological installation means a premises where patients are examined or treated and which contains radiological equipment.

Radio diagnostic means pertaining to in vivo diagnostic nuclear medicine, medical diagnostic radiology, and dental radiology.

Radio therapeutic means pertaining to radiotherapy including nuclear medicine for therapeutic purposes.