Somerset Partnership NHS
NHS Foundation Trust

DIAGNOSTIC IMAGING: REQUESTING AND INTERPRETING OF RADIOGRAPHS BY NON-MEDICAL PRACTITIONERS

(to be read in conjunction with Diagnostic Clinical Tests and Screening Procedures Management policy)

Version:	2
Ratified by:	Senior Managers Operational Group
Date ratified:	August 2015
Title of originator/author:	Consultant Nurse, Minor Injury Service Consultant Physiotherapist, Musculoskeletal Interface Service
Title of responsible committee/group:	Clinical Governance Group
Date issued:	**August 2015**
Review date:	**July 2018**
Relevant Staff Groups:	Staff in MIU, OASIS and podiatry who request and interpret radiographs as part of their role

This document is available in other formats, including easy read summary versions and other languages upon request. Should you require this please contact the Equality and Diversity Lead on 01278 432000

DOCUMENT CONTROL

Reference Number	**Version**	**Status**	**Author**
Aug15/DI	2	Final	Consultant Nurse

Amendments	v1.1	29 April 2010	Document created
	v1.2	17 May 2010	Review by Clinical Working Group
	v1.3	24 Aug 2010	Second review by Clinical Working Group
	v1.4	Sept. 2010	Review by SQUID
	v1.5	17 Mar 2011	Addition of RUH Protocol
	v1.6	14 Apr 2011	Amendments from SQUID
	v1.7	June 2015	Policy reviewed at due date

Document objectives: This document outlines procedures for non-medical clinical staff involved in the requesting and initial interpretation of diagnostic imaging		
Intended recipients: All non-medical clinical staff involved in the requesting and interpreting of radiographs (Emergency Nurse Practitioners, Physiotherapists, Podiatrists and consultant Podiatric surgeons)		
Committee/Group Consulted: Minor Injury Best Practice Group, Physiotherapy/ Musculoskeletal Best Practice Group and Podiatric Services, CPRG		
Monitoring arrangements and indicators: See Section 8.		
Training/resource implications: See Section 6		
Approving body and date	Clinical Governance Group	Date: August 2015
Formal Impact Assessment	Impact Part 1	Date: August 2015
Clinical Audit Standards	NO	Date: N/A
Ratification Body and date	Senior Managers Operational Group	Date: August 2015
Date of issue	**August 2015**	
Review date	**July 2018**	
Contact for review	Consultant Nurse (Minor Injury Units)	
Lead Director	Director of Nursing and Patient Safety	

CONTRIBUTION LIST Key individuals involved in developing the document

Name	**Designation or Group**
Mike Paynter	Minor Injury Service
Janet Thomas	Minor Injury Service
Rob Stenner & Caroline Nation	Musculoskeletal Interface Service
Julian James & Paul Aldwinkle	Podiatry Surgeons/Podiatrists
Minor Injury Service & Physiotherapy Service	Best Practice Group
Members	Clinical Governance Group

CONTENTS

1 INTRODUCTION

1.1 The purpose of this Policy is to set out the criteria and training requirements acceptable to Somerset Partnership NHS Foundation Trust for the undertaking of requesting and interpreting radiographs.

1.2 Each clinician must respect that they are personally accountable for their practice and have professional accountability in line with their relevant professional Codes of Conduct.

2 PURPOSE & SCOPE

2.1 The main aims of the Policy are:

- To ensure that only competent staff, trained in clinical examination request radiographs
- To ensure that only competent staff, trained in clinical examination and radiographic interpretation, request and interpret radiographs
- To facilitate the clinicians to undertake the full episode of care

2.2 This Policy should be read in conjunction with the following policies/procedures:

- Consent to examination or treatment policy for community health services staff only
- Safeguarding Vulnerable Adults at Risk
- Safeguarding Children Child Protection
- Safeguarding Child Protection Legal Guidance
- Ionising Radiations (Medical Exposure) Regulations: (IR (ME) R). 2000 (Appendix A) 2006 and 2011 amendments (Appendix B)
- Diagnostic clinical tests and screening procedures management policy

3. DUTIES AND RESPONSIBILITIES

3.1 All Somerset Partnership NHS Foundation Trust staff (including agency/locum staff) who make medical imaging requests are responsible for clear and precise patient identification, documentation of relevant clinical findings and rationale for particular investigations. Initial radiographic interpretation will be recorded in the patient's clinical records and form the basis for diagnostic reasoning.

3.2 Local managers will keep a list of all non-medical practitioners who request and interpret radiographs

3.3 Managers will keep copies of all documentation relating to competence including IR(ME)R status, radiographic interpretation education.

3.4 Non –medical practitioners who request and interpret radiographs will follow local guidance

3.5 Senior clinical staff within individual clinical specialities will be responsible for inducting new clinicians into this policy and guidance

4. EXPLANATIONS OF TERMS USED

4.1 Explanation of terms used are identified within the body of the document

5. SPECIFIC REQUIREMENTS PERTAINING TO LOCAL ARRANGEMENTS

Requesters/Interpreters are required to follow the relevant radiograph policy pertinent to the Radiology department that they are requesting. Therefore:

- When requesting at Frome, clinicians will abide by the Royal United Hospital Policy - (Appendix E)

- When requesting at West Mendip/Chard/Bridgwater/Minehead, clinicians will abide by the Taunton and Somerset Foundation Trust Radiographic Policy - (Appendix F)

The implication of this is that clinicians will be required to vary their requesting in accordance with the relevant radiology policy depending on their location.

6 TRAINING REQUIREMENTS

6.1 All staff requesting and interpreting diagnostic imaging will have completed formal IR(ME)R training in addition will have also undertaken approved and accredited specialist education as identified by the relevant professional bodies.

6.2 Clinicians Interpreting radiographs will:

- All service clinical managers will keep a list of all non-medical clinicians who request and interpret radiographic images

- Clinical managers will keep copies of all documentation relating to competence including IR(ME)R status and radiographic interpretation.

- Non- medical clinicians who request and interpret radiographic images will be considered clinically competent by the relevant lead in their sphere of clinical practice

- Be familiar with and use when appropriate “Making the Best Use of the Department of Clinical Radiology” 2007

See Appendix B - Emergency Nurse Practitioners, Physiotherapists, Podiatrists and Podiatric Surgeons.

7. EQUALITY IMPACT ASSESSMENT

All relevant persons are required to comply with this document and must demonstrate sensitivity and competence in relation to the nine protected characteristics as defined by the Equality Act 2010. In addition, the Trust has identified Learning Disabilities as an additional tenth protected characteristic. If you, or any other groups, believe you are disadvantaged by anything contained in this document please contact the Equality and Diversity Lead who will then actively respond to the enquiry.

8. MONITORING COMPLIANCE AND EFFECTIVENESS

8.1 Audit

- The consultant nurse will carry out an ongoing audit of radiographic interpretation, producing a report and action plan when required.

- Lead clinicians for Musculoskeletal and Podiatry will carry out an on-going audit with criteria as listed below producing a report and action plan when required.

8.2 Records

- Managers will keep a list of all non- medical practitioners who request and interpret radiographs.

- Managers will keep copies of all documentation relating to competence including attendance at IR (MER) training, radiographic interpretation competency and academic qualifications.

9. COUNTER FRAUD

9.1 The Trust is committed to the NHS Protect Counter Fraud Policy – to reduce fraud in the NHS to a minimum, keep it at that level and put funds stolen by fraud back into patient care. Therefore, consideration has been given to the inclusion of guidance with regard to the potential for fraud and corruption to occur and what action should be taken in such circumstances during the development of this procedural document.

10. RELEVANT CARE QUALITY COMMISSION (CQC) REGISTRATION STANDARDS

10.1 Under the **Health and Social Care Act 2008 (Regulated Activities) Regulations 2014 (Part 3), the fundamental standards** which inform this procedural document, are set out in the following regulations:

Regulation 9:	Person-centred care
Regulation 10:	Dignity and respect
Regulation 11:	Need for consent
Regulation 12:	Safe care and treatment
Regulation 13:	Safeguarding service users from abuse and improper treatment
Regulation 15:	Premises and equipment
Regulation 16:	Receiving and acting on complaints
Regulation 17:	Good governance
Regulation 19:	Fit and proper persons employed
Regulation 20:	Duty of candour

10.2 Under the **CQC (Registration) Regulations 2009 (Part 4)** the requirements which inform this procedural document are set out in the following regulations:

Regulation 12:	Statement of purpose
Regulation 15:	Notice of changes
Regulation 18:	Notification of other incidents

10.3 Detailed guidance on meeting the requirements can be found at http://www.cqc.org.uk/sites/default/files/20150311%20Guidance%20for%20providers%20on%20meeting%20the%20regulations%20FINAL%20FOR%20PUBLISHING.pdf

Relevant National Requirements

Department of Health initiatives

NICE and other clinical guidance

11. REFERENCES, ACKNOWLEDGEMENTS AND ASSOCIATED DOCUMENTS

References

The Royal College of Radiologists (2007). 4th Edition. *Making the Best Use of a Department of Clinical Radiology.* London

Cross reference to other procedural documents

Development & Management of Organisation-wide Procedural Documents Policy and Guidance

Diagnostic Clinical Tests and Screening Procedures Management policy

Learning Development and Mandatory Training Policy

Risk Management Policy and Procedure

Untoward Event Reporting Policy and procedure

All current policies and procedures are accessible in the policy section of the public website (on the home page, click on 'Policies and Procedures'). Trust Guidance is accessible to staff on the Trust Intranet.

12. APPENDICES

12.1 For the avoidance of any doubt the appendices in this policy are to constitute part of the body of this policy and shall be treated as such. This should include any relevant Clinical Audit Standards.

Appendix A	The Ionising Radiation (Medical Exposure) Regulations 2000
Appendix B	The Ionising Radiation (Medical Exposure) Regulations 2006 and 2011 Amendments
Appendix C	Audit Standard Table
Appendix D	Emergency Nurse Practitioners, Minor Injury Units (MIUs)
Appendix E	Physiotherapists, Podiatric surgeons and Podiatrists working in Extended Roles in the Musculoskeletal Service
Appendix F	Policy for Emergency Nurse Practitioner requested radiographs in Emergency Department (ED) at the Royal United Hospital
Appendix G	Taunton & Somerset NHS Foundation Trust Referral of Patients for Radiological Examinations
Appendix H	Standards for the Reporting and Interpretation of imaging Investigations

Appendix A

THE IONISING RADIATION (MEDICAL EXPOSURE) REGULATIONS 2000

(Together with notes on good practice)

1 INTRODUCTION

1.1. This document provides guidance on the Ionising Radiation (Medical Exposure) Regulations 2000 (the Regulations) and notes on good practice. The guidance is not intended to be binding and cannot take the place of legal advice. It sets out the Department's view of how certain provisions of the Regulations should be interpreted but the ultimate arbiter in any case of doubt would be the Court. Only it could make a definitive ruling.

1.2 The Regulations implement for Great Britain the majority of the provisions of Council Directive 97/43/Euratom of 30 June 1997 (the "Medical Exposures Directive") laying down the basic measures for the radiation protection of persons undergoing medical exposures. The remainder is implemented in the Ionising Radiations Regulations 1999 ("IRR 1999"). The Directive reflects the 1990 Recommendations of the International Commission on Radiological Protection.

1.3 The Regulations revoke and replace the Ionising Radiation (Protection of Persons Undergoing Medical Examination or Treatment) Regulations 1988.

2 JUSTIFICATION

2.1 The Medical Exposures Directive requires that all medical exposures to ionising radiation must be justified prior to the exposure being made. The Directive refers to two levels of justification; justification of types of practice and justification of individual medical exposures.

2.2 The Regulations apply only to individual medical exposures. Hence, justification of types of practice is not addressed within the Regulations.

2.3 It is intended that justification of types of practice involving medical exposures will be covered by amendment to IRR 1999.

3 THE PRIVATE SECTOR

3.1 Practice involving the use of ionising radiation in the NHS and the private sector of healthcare is broadly consistent. Whilst this guidance is drafted with specific reference to the NHS, the Regulations and guidance apply to both the NHS and the private sector.

4 APPLICATION - REGULATION 3

4.1 This regulation lists the medical exposures to which the Regulations apply. Compared to the 1988 Regulations, these Regulations cover an increased range of exposures to ionising radiation, and in particular include exposures for the purpose of medical or biomedical research.

4.2 The Directive covers "exposure of individuals knowingly and willingly helping (other than as part of their occupation) in the support and comfort of individuals undergoing medical exposure". Such exposures are not covered by these Regulations but are covered by IRR 1999.

5 INTERPRETATION - REGULATION 2

5.1 This regulation defines a number of terms used in the Regulations. Certain key definitions are discussed below.

5.2 **“Appropriate Authority”**

5.2.1 Since the Regulations apply to England, Scotland and Wales, it was necessary to provide for different authorities in each of these areas for enforcement and reporting purposes. The definition accordingly states the relevant entity for each of England, Scotland and Wales.

5.3. **"Diagnostic Reference Level”**

5.3.1 The Regulations require the employer to set diagnostic reference levels and provide procedures on how they are to be used. A diagnostic reference level should be set for each standard radiological investigation. They should also be set for interventional procedures, nuclear medicine investigations and radiotherapy planning procedures.

5.3.2 Diagnostic reference levels should be expressed in quantities which are directly applicable and relevant to the examination in question to enable the resulting patient dose to be calculated eg dose area product, screening time etc. Diagnostic reference levels can be decided on by an employer after considering local exposures or administered activities of standard radiological examinations. Records of exposures or activities used previously can be used for this purpose. However, regard must be had to European data where available when setting local diagnostic reference levels (see also regulation 4(3) (c)).

5.4 **"Employer”**

5.4.1 This definition is not as used conventionally in employment law. In most circumstances within the NHS, a Trust will be considered to be the employer.

5.4.2 If an employer, eg an NHS Trust, contracts a third party to provide services (including the provision of operators), then the Trust will be the

employer as regards the operators for the purposes of the Regulations, but the third party is the employer of the operators for employment law purposes.

5.4.3 Equipment ownership has no impact on the employer responsibilities under these Regulations.

5.5 **“Equipment”**

5.5.1 Equipment, as referred to in these Regulations, includes that equipment used for nuclear medicine procedures, such as gamma cameras etc. In diagnostic radiology auxiliary equipment that can indirectly affect the exposure such as grids, cassettes, tables, cameras, monitors and imaging software is included.

5.6 **"Medico-Legal Procedure”**

5.6.1 This category of exposure will include those required for legal purposes of any kind eg those required in connection with legal proceedings or those required prior to emigration.

5.7 **“Medical Physics Expert”**

5.7.1 The science degree or its equivalent referred to in this definition should be relevant to the use of ionising radiation as applied to medical exposures. The medical physics expert (MPE) is required to have been adequately trained (as defined in the Regulations) for his involvement in medical exposures under the Regulations. The MPE is expected to undertake tasks such as giving advice on patient dosimetry, development and use of new and/or complex techniques, as well as other matters related to radiation protection concerning medical exposures.

5.7.2 The MPE should not be confused with the Radiation Protection Adviser as identified under the IRR 1999. The functions are different although, in practice, it is possible that the same person may undertake both roles.

5.8 **"Operator”**

5.8.1 An operator is anyone who carries out a practical aspect. The range of functions covered by the term ‘practical aspects’ is broad. It is unlikely that a single operator will carry out all these functions for any individual medical exposure.

5.8.2 Nevertheless, an operator usually will carry out a variety of functions and therefore it is essential that the functions and responsibilities of individual operators are clearly defined within standard operating procedures. The operators who can undertake certain tasks may be identified in a variety of ways in the employer’s procedures, for example, by profession, grade, or individual name. In some cases, detailed job descriptions may help.

5.8.3 In some cases, the practitioner may also undertake practical aspects of an exposure eg fluoroscopic screening. In these circumstances, the practitioner becomes an operator with regard to these specific functions.

5.8.4 Examples of operators include doctors, medical physicists, medical physics technicians, nurses, radiographers and radiopharmacists. Third party service engineers would not normally be considered as operators. Where significant changes to equipment have been made, these should be checked where practicable by an operator (eg an employee of the NHS Trust) before equipment is brought into clinical use.

5.9 **"Practical Aspects"**

5.9.1. The range of functions covered by this term is extensive and includes the supporting functions prior to the exposure taking place eg the calibration of equipment that emits ionising radiation, the preparation of radioactive medicinal products, computer planning and calculation of monitor units to be delivered in radiotherapy etc, as well as of performing the exposure itself.

5.10. **"Practitioner"**

5.10.1 Decisions on who is entitled to act as a practitioner should be taken at local level by agreement between the employer and the healthcare professionals involved in medical exposures. Such decisions should be based on the type of medical exposure and on specific circumstances and may be restricted eg it may be appropriate to agree that certain health professionals can act as a practitioner for radiographic procedures for extremities, but not for complex interventional examinations.

5.10.2 The primary responsibility of the practitioner is to justify medical exposures. This requires the practitioner to have a full knowledge of the potential benefit and detriment associated with the procedure under consideration. Clearly all practitioners need to be adequately trained to undertake this function

5.11 **"Radiological"**

5.11.1 By stating that the term 'radiological' applies to planning and guiding radiology, activities such as those associated with radiotherapy simulation, the planning of radiotherapy treatments etc are included as well as those associated with interventional radiology.

5.12 **"Referrer"**

5.12.1 As with practitioners, decisions on who is entitled to act as a referrer should be taken at local level by agreement between the employer and the healthcare professionals involved in medical exposures. Such decisions should be based on the type of medical exposure and on specific circumstances and entitlement to act as a referrer may be

restricted eg it may be agreed for example, that certain health professionals can act as a referrer for radiographic procedures for extremities, but not for complex CT examinations. Further examples, where agreed locally, might include certain requesting of specific planning procedures involving ionising radiation for patients on whom it has already been agreed that radiotherapy is appropriate.

5.12.2 The range of procedures that can be requested by a referrer should be agreed locally between the referrer and the employer of the radiological installation. It is intended that the healthcare professionals involved in imaging and/or therapy as appropriate at that site will advise that employer.

5.12.3 In situations where an individual, following an invitation, undergoes an exposure as part of a national screening programme, there is no requirement in practice for a named referrer.

6 DUTIES OF THE EMPLOYER - REGULATION 4

6.1 Regulations **4(1)**

6.1.1 This regulation requires the employer to establish written standard operating procedures. These procedures are intended to provide a framework under which professionals can practice. It is recommended that the employer seek advice from professional colleagues from the fields of radiology, radiotherapy and nuclear medicine in establishing the procedures.

6.1.2 In practice, the employer may ask a practitioner or operator to produce a written procedure. However, it is important to note that while the task may be delegated, the responsibility remains with the employer eg the task of producing a patient identification procedure can be delegated by the employer, but if the procedure is not produced in fact then the employer remains responsible under the Regulations. Procedures should be specific where necessary but allow freedom for professional judgment where appropriate. Examples are given in Guidance to Schedule 1. However the matters listed in Schedule 1 are not exhaustive and may be considered a minimum requirement. As a matter of good practice, the procedures should be reviewed at regular intervals and be signed and dated accordingly.

6.1.3 In some cases, the employer is the same person as the practitioner and/or the operator (for example, some dental practitioners). Such an individual is still required to establish the procedures required by this regulation and to comply with them.

6.2 **Regulation 4(2)**

6.2.1. The Policies required under this regulation should not be confused with employer's procedures required by regulation 4(1). Policies cannot be

absolute or totally comprehensive as it is not possible to produce detailed and rigid Policies for every examination. However, they should be specific to each examination and machine as appropriate, eg in diagnostic practice, for a particular x-ray room, x-ray exposure factors for a specific examination (PA chest: 120kV 2mAs). They must be written down and their status clear. Policies should allow latitude for professional judgment but where the latitude provided is exceeded and 5 exposure factors varied, it would be advisable to record the changes made. Where, on commissioning, exposure values are programmed via the console into the x-ray generator, it is recommended that a record of the values be kept in the department together with any changes to these values, whether for individual patients, or as a result of agreed Policy changes.

6.2.2 In radiotherapy, the Policies might refer to standard dose regimes, energies and beam projections and may be specific to each consultant if necessary. Such Policies would not negate the need for individual planning to produce the intended therapeutic effect.

6.3 Regulation 4(3) (a)

6.3.1 In establishing the referral criteria for medical exposures required under this regulation, it will be appropriate to consult and agree with those professionals involved in medical exposures. It is expected that most departments already have criteria in place for many procedures. For example, the Royal College of Radiologists have produced recommendations for diagnostic practice and these would be an acceptable foundation on which to base local criteria.

6.3.2 The locally agreed criteria must be made available to all referrers to that department. There is an obligation to produce these criteria regardless of the size or type of the department, types of examinations performed, or whether the employer, referrer, practitioner and operator are the same person.

6.4 Regulation 4(3) (b)

6.4.1 The quality assurance programmes required by this regulation are for standard operating procedures, not equipment, which is dealt with under IRR 1999. All procedures should be regularly reviewed to ensure that they are effective and appropriate and to identify any necessary amendments.

6.5 **Regulation 4(3) (c)**

6.5.1 This regulation requires the employer to establish diagnostic reference levels for standard radio-diagnostic examinations. National reference levels may be taken into account in doing so, for example, in nuclear medicine procedures, data produced by ARSAC (Administration of Radioactive Substances Advisory Committee) will be relevant. The Regulations require that regard be had to European levels, where available.

6.6 **Regulation 4(3)(d)**

6.6.1 The dose constraints to be established by the employer under this regulation should be applied to research Policies involving standard radio diagnostic procedures. Such research should be subject to a dose constraint based on the total dose from all radio-diagnostic procedures included in the Policy.

6.7 **Regulation 4(4)**

6.7.1 This regulation requires the employer to ensure that practitioners and operators are both adequately trained and undertake continuing education and training. With regard to the latter, it is to be noted that the duty is not on the employer to provide continuing education and training himself. The obligation will be satisfied if he takes steps to ensure that the practitioner and operator seek out and attend such education and training. Where the employer is also the practitioner and/or operator, he must himself ensure that he undertakes appropriate continuing education and training.

6.7.2 In cases where the employer engages sub-contractors, the obligation to ensure compliance with this regulation will be satisfied by the employer if he includes a clause in the contract stipulating that the practitioner or operator to be engaged by him must have been adequately trained and undertake continuing education and training. Records of previous and continuing education and training must be kept by the sub-contracted company (or in the case of the self-employed, themselves) eg for agency staff, the agency employer is responsible for keeping up-to-date training records on the staff supplied by the agency. These records also must be made available to the employer, upon request. See also regulation 11.

6.7.3 Requirements for continuing education are integral to the functions of health professionals and employers should make provisions for such training.

6.8 **Regulation 4(5)**

6.8.1 This regulation requires the employer to carry out investigations of incidents and appropriate reviews. In most cases, the term 'much greater than intended' as used in this regulation should be interpreted as for IRR 1999. HSE has published specific guidance on doses which are likely to

be much greater than intended for particular types of medical exposure. While this guidance was not developed for this purpose, application of this guidance is appropriate. Incidents which occur as a result of equipment malfunction or breakdown must still be reported to the HSE under IRR 1999.

6.8.2 Patients who undergo a procedure that was not intended, as a result of mistaken identification or other procedural failure, and consequently have been exposed to an ionising radiation dose should be considered as having received an unintended dose of radiation.

6.8.3 The detailed investigation required by the Regulations should be aimed at:

- establishing what happened - identifying the failure
- deciding on remedial action to minimise the chance of a similar failure
- estimating the doses involved.

6.8.4 The notification is required to be made directly to the appropriate authority appointed for these Regulations.

6.8.5 As a matter of good practice, patients who have been exposed to a dose of ionising radiation much greater than intended should be informed of the incident, unless there is a good reason for them not to be. It should be a local decision on how, when and by whom the patient is notified, but the practitioner and referring clinician should be involved. When the patient is unable to understand the information given, it may be more appropriate to inform the patient's representative or parent/guardian. It would be advisable to record decisions not to inform the patient or the patient's representative or parent/guardian in the patient's case notes. Further, whilst the Regulations refer to those incidents resulting in exposures much greater than intended, it is recognised that in certain situations eg radiotherapy, exposures much lower than intended can also have serious consequences. Whilst not notifiable under these Regulations, as a matter of good practice, the employer may wish to carry out his own investigations in such circumstances.

6.9 **Regulation 4(6)**

6.9.1 The review required by this regulation is intended to provide an opportunity at a local level to evaluate the reasons why diagnostic reference levels have been exceeded. Corrective action might include setting new values for diagnostic reference levels (see regulation 4(3)(c) and notes thereon). Corrective action may also include retraining an individual. This might not be restricted to techniques directly involving ionising radiation.

6.9.2 It is not intended that this regulation should replace or diminish the need for regular reviews of diagnostic reference levels.

7 DUTIES OF THE PRACTITIONER, OPERATOR AND REFERRER - REGULATION 5

7.1 Regulation 5 sets out the respective responsibilities of practitioner, operators and referrers and makes clear that where the employer also acts in one or more of these roles concurrently, he is responsible accordingly. Points to note are as follows:

7.2 **Regulation 5(1)**.

7.2.1 The practitioner and the operator must comply with the employer's procedures and where these include detailed standard operating procedures, they must be followed explicitly eg patient identification and checking procedures. All those matters required by the Regulations to be in employers' procedures (Schedule 1) are binding.

7.3 **Regulation 5(3)**.

7.3.1 This regulation deals with the allocation of responsibility for practical aspects of a medical exposure to specific individuals. The employer must set out in his procedures who will be entitled to act in this capacity. In doing so he should have due regard to professional roles and appropriate training. The person to whom a practical aspect has been allocated is responsible for that aspect (Regulation 5(4)).

7.4 **Regulation 5(4)**

7.4.1 Those persons undertaking practical aspects (operators) are responsible under the Regulations for their functions. No overarching responsibility is held by another person.

8 JUSTIFICATION OF INDIVIDUAL MEDICAL EXPOSURES - REGULATION 6

8.1 This regulation deals with the justification and authorisation of individual medical exposures and provides that no one may carry out a medical exposure unless the matters set out in regulation 4(1)(a)-(e), where applicable, have been complied with. Points to draw attention to under this regulation are as follows: - Appendix C

8.2 **Regulation 6(1)**

8.2.1 In this regulation, the phrase "carry out a medical exposure" refers to the actual process of exposure to ionising radiation itself, and not to other practical aspects of the exposure, such as calibration, which can be carried out irrespective of the justification of individual exposures.

8.3 **Regulation 6(1)(a)**

8.3.1 The practitioner is responsible for the justification of each individual medical exposure. This should be based on his knowledge of the hazard associated with the exposure and the clinical information supplied by the referrer. Authorisation is a separate process and is the means by which it can be demonstrated that justification has been carried out. The method of authorisation may depend on local circumstances and may include a signature on the request card, addition of an electronic signature etc. It is recommended that the employer specify a method of authorisation to be used locally to ensure a consistent approach.

8.3.2 In cases where the referrer is the same person as the practitioner and/or the operator (eg some dental practitioners), justification and authorisation still must be carried out, but this may be done by the same person.

8.3.3 In nuclear medicine, the ARSAC certificate holder will be the practitioner, although the authorisation of the procedure may be undertaken by an operator under guidelines (see regulation 6(5)).

8.4 **Regulation 6(1)(c)**

8.4.1 Guidance on the establishment, composition and functions of Local Research Ethics Committees (LRECs) is provided by the Health Departments. The guidance states that all research in the UK should be approved by a LREC, whether or not it has been submitted also to a Multi-centre Research Ethics Committee (MREC). The LREC can recommend that research is undertaken with a proviso that a certain dose is not exceeded.

8.5 **Regulation 6(2)**

8.5.1 The process of justification must give appropriate weight to the factors specified in regulation 6(2) and in doing so pay special attention to the matters set out in regulation 6(3).

8.5.2 The criteria referred to in regulation 6(2)(d) highlight the need, where practicable, to choose techniques involving the minimum necessary amount of exposure to ionising radiation. These are to be preferred where they have the same objective. In practice, use of such techniques will be influenced by availability. The implications of delaying diagnosis or treatment in order to provide the preferred method should be weighed against the potential detriment associated with an increased radiation dose of other techniques.

8.6 **Regulation 6(4)**.

8.6.1 Regulation 5(5) requires the referrer to supply the practitioner with sufficient medical data relevant to the medical exposure requested to enable the practitioner to decide whether the exposure can be justified.

Regulation 6(4) requires the practitioner to consider the data provided by the referrer before justifying a medical exposure. In order for the data to be sufficient for the purposes of justification it may need to include previous diagnostic information or medical records. However, the Regulations do not require the medical records to be provided for every procedure.

8.7 **Regulation 6(5)**

8.7.1 The Regulations recognise that it may not be practicable for a practitioner to consider every request for a medical exposure. Regulation 6(5) requires practitioners to produce guidelines which must be followed by operators when it falls to them to authorise an individual exposure. It must be borne in mind that any person who authorises an exposure becomes an operator by virtue of doing so. The guidelines may be written to allow flexibility eg in radiology an agreed range of projections which may be taken to provide the necessary clinical information. This will allow the operator the appropriate freedom to exercise professional judgment.

8.7.2 If the operator authorises an exposure which does not accord with the guidelines, he will be in breach of the regulation and will be responsible accordingly. In these circumstances, the operator's actions in themselves do not change the status of the operator to one of a practitioner in respect of that exposure.

9 OPTIMISATION - REGULATION 7

9.1 Regulation 7 provides for the optimisation process which involves ensuring that doses arising from exposures are kept as low as reasonably practicable. Optimisation is a process which relies heavily on professional competence and skill. While employer's standard operating procedures can provide a framework within which the health professional is to work, they will not generally prescribe the manner in which the functions specified therein are to be carried out. This is left to the health professionals to effect in a manner commensurate with their professional status.

9.2 Points to highlight in relation to optimisation are as follows:

9.3 **Regulation 7(2)**

9.3.1 This regulation requires individual planning of target volumes for all radio-therapeutic exposures. It also applies to therapeutic research exposures therefore.

9.3.2 In complying with this regulation, the practitioner should use the best means available to him. However, in order to comply with the regulation it will not be necessary, for example, in external beam radiotherapy, that all patients be planned for treatments using therapy machines equipped with multi-leaf collimators. In practice, decisions on the use of such devices

will rest with the practitioner and may depend on availability, clinical circumstance etc. Equally, for therapy with unsealed sources, the requirement for individual planning will be satisfied by carrying out an assessment of the individual patient. However, recommended standard activities of radiopharmaceuticals can still be used.

9.4 **Regulation 7(4)**

9.4.1 This regulation requires the employer's procedures to provide safeguards for medical and biomedical research programmes and to specify how and by whom these shall be affected. The research co-ordinator may be the person best placed to carry out some of these tasks and, where he does so, he will be the operator for those purposes.

9.4.2 All research programmes should be submitted to a Local Research Ethics Committee for approval before commencing.

9.5 **Regulation 7(4)(c)**

9.5.1 This regulation requires dose constraints to be applied where no direct medical benefit for the individual is expected from the exposure. The constraint must be set by the employer in his procedures and must not be exceeded. The constraint should be set at a level to facilitate the research, and be deemed appropriate by the practitioner and agreed by the LREC.

9.6 **Regulation 7(4)(d)**

9.6.1 This regulation requires the planning of individual target levels of doses for patients who voluntarily undergo experimental diagnostic or therapeutic practices in cases where some benefit to the patient is expected. The practitioner is identified as the person who is most able to set these target levels, due to his knowledge of ionising radiation and its potential risks. The practitioner may seek advice from others to clarify the doses involved.

9.6.2 In separating these cases from the situation in (c) above, the Regulations recognise that where there is potential benefit for patients from exposures as part of research, setting a constraint is inappropriate. However, regulation 7(4)(d) requires that some target level of dose 10 is set before the exposure begins, for which the benefit still outweighs the detriment. In this way, excessive doses should be avoided. For example, in routine interventional techniques, the radiation dose from screening should not be so great as to produce unacceptable levels of skin damage and a target level should ensure that this will not happen.

9.7 **Regulation 7(5)**

9.7.1 This regulation requires the employer's procedures to provide for the giving of instructions and information in appropriate cases where radioactive medicinal products are administered. The regulation sets out the persons to whom such instructions and information should be given.

9.7.2 Regulation 7(5)(a) refers to the patients themselves where they are adults or children who have capacity to consent to the treatment or diagnostic procedure. A child is a person under the age of 18 in England and Wales or 16 in Scotland. The regulation recognises that many "children" are mature enough to consent to treatment etc and to understand what is involved and that such children should be given the information/advice themselves. However, in such cases, it will usually be appropriate to give the information/advice to the person(s) with parental responsibility (generally the parent or parents) as well.

9.7.3 Regulation 7(5)(b) deals with where the patient is a child who lacks capacity to consent. The regulation requires that the information be given to the person(s) with parental responsibility.

9.7.4 Regulation 7(5)(c) deals with mentally incapable adults. In some cases there may be a court appointed receiver (or, in Scotland, a tutor dative or curator) or person with an enduring power of attorney who can deal with their affairs. However, such persons do not necessarily have any rights in relation to the individual's health care. Therefore the most appropriate person to whom to give the information in practice is likely to be a relative taking care of the patient or, for example, the manager of a care home. The position in Scotland will change when the Adults with Incapacity (Scotland) Act is implemented. This is expected to be from the summer of 2001 onwards.

9.8 **Regulation 7(6)**

9.8.1 This regulation sets out some of the matters to be addressed in the information/instructions to be provided pursuant to regulation 7(5) and when they should be given. In practice, the level of administered activity and resulting dose to others will determine what, if any, advice needs to be given. For example, it will usually be appropriate to give advice in most therapy exposures. A small number of diagnostic exposures also may be of sufficient activity to require advice etc to be given eg scanning for metastases after thyroid ablation.

9.9 **Regulation 7(7)**

9.9.1 This regulation requires the practitioner/and the operator to pay special attention to certain factors in the optimisation process. One such factor is high doses to the patient. This will be relevant to procedures, such as interventional radiology, radiotherapy and some CT scanning, which

deliver an increased radiation dose compared to most routine diagnostic examinations.

9.9.2 Another factor is potential pregnancy in particular if abdominal and pelvic regions are involved. In practice, the dose to the uterus, and, where pregnancy is confirmed, to the unborn child, is likely to vary with the anatomical site and magnitude of the exposure in radiology and with the administered activity and radiopharmaceutical in nuclear medicine. Where practicable, the scheduling of the exposure should be influenced by the date of the last menstrual period.

9.9.3 In nuclear medicine, females who are breast feeding must also be paid special attention. In practice, depending on the administered activity and radiopharmaceutical used, it may be necessary to advise the patient temporarily to cease breast feeding.

9.10 **Regulation 7(8)**

9.10.1 This regulation requires the employer to ensure that a clinical evaluation of the outcome of each medical exposure is recorded and to set out in his procedures how and when this is to be done. This evaluation should detail the resulting diagnostic findings or therapeutic implications. If it is known prior to the exposure taking place that no clinical evaluation will occur, then the exposure would not be justified and could not lawfully take place.

9.10.2 Where the employer is concurrently the practitioner/operator, he must still make the appropriate record. Where the evaluation of a medical exposure is not done by an operator engaged by the employer, that employer must take steps to ensure that it is carried out by a third party in accordance with the employer's procedures

9.10.3 Factors relevant to the patient dose should be included in the record where appropriate, in order that, if necessary, at a later date an estimation of the effective dose to the patient can be made.

9.11 **Regulation 7(9)(a)**

9.11.1 This regulation requires the operator to ensure that, in fluoroscopy, examinations without devices to control the dose rate are limited to justified circumstances. An example of when such justification may exist is in paediatric radiology where devices designed to control the dose rate can result in doses greater than necessary.

10 CLINICAL AUDIT - REGULATION 8

10.1 This regulation requires the employer's procedures to provide for the carrying out of clinical audit as appropriate. In doing so, the employer may wish to take account of existing guidance, for example in England

and Wales: “Clinical Governance: Quality in the new NHS” (March 1999). Similar Guidance exists in Scotland.

11 EXPERT ADVICE - REGULATION 9

11.1 This regulation requires the employer to ensure that a medical physics expert (MPE) is involved, to varying degrees, in every medical exposure. In practice, the level of involvement of the MPE should be determined by the level of hazard and risk associated with the exposure and the amount of benefit expected from their advice. For most radiotherapy, MPEs are likely to be full-time contracted members of staff and will be available on site. For nuclear medicine imaging, the number of sessions per week that the MPE will be on site is likely to vary with the complexity of the service offered.

11.2 In all other radiological practices it is recommended that a MPE’s availability be secured under contract although, depending on the rate of introduction of new techniques, the amount of time spent on site in fact may be limited (although for dental radiology it is unlikely that a MPE will need to be contracted on a permanent basis). In practice, it may be appropriate only to seek advice as and when new techniques are introduced.

12 EQUIPMENT - REGULATION 10

12.1 Regulation 10 sets out some requirements in respect of equipment. However, most of the requirements of the Directive are addressed in IRR 1999 and reference to those Regulations should be made accordingly.

12.2 The regulation requires the employer to keep and make available for inspection an inventory of equipment and specifies what information the inventory must contain.

12.3 The inventory should be preserved for periods consistent with Health Departments' guidance on retention of records.

12.4 The inventory must be made available, on request, to officials acting on behalf of the appropriate authority, normally inspectors appointed for the purposes of the Regulations.

13 TRAINING - REGULATION 11

13.1 This regulation prohibits any practitioner or operator from carrying out a medical exposure or any practical aspect without having been adequately trained. An exception is made for trainees where they participate in practical aspects under the supervision of someone who is adequately trained. Adequate training is training that satisfies the requirements of Schedule 2.

13.2 The regulation also requires the employer to keep and have available for inspection an up-to-date record of all practitioners and operators engaged by him showing the date on which training was completed and the nature of the training. Where the employer is concurrently practitioner or operator, he must keep a record of his own training,

13.3 Training records should be available separately from general personal records and preserved for periods consistent with Health Departments' guidance on retention of records.

13.4 Regulation 11(5) makes clear that, where an employer engages individuals to act as practitioners or operators but those individuals remain employed by another body, eg agency staff, then the second party ie the agency are responsible for keeping and maintaining the training records. These must be made available to the first employer upon request so that he can make them available to officials acting on behalf of the appropriate authority as the Regulations require.

14 ENFORCEMENT AND OFFENCES - REGULATION 12

14.1 This regulation provides for the Regulations to be enforced as if they were made under section 15 of the Health and Safety at Work etc. Act 1974 save that the enforcing authority is the appropriate authority. As explained in the definitions (see notes on Section 2) the enforcing authority for is specific to each of the Home Countries. The provisions of the 1974 Act regarding offences also apply.

15 EMPLOYER'S PROCEDURES - SCHEDULE 1

15.1 Schedule 1 sets out a list of matters that must be covered in the employer's procedures. The list is not exhaustive but all those matters identified in Schedule 1 will be binding as a result of having to be included in the procedures. Employers are recommended to take care in wording the procedures as any additional matters which the employer wishes to provide for but intends not to be binding must take a different form and be easily identified as such.

15.2 Some of the matters listed in Schedule 1 require further comment. These are as follows:

15.3 **"Procedures to correctly identify individuals to be exposed to ionising radiation"**

15.3.1 The patient identification procedure must specify how a patient is to be identified before a medical exposure is made. The procedure should be positive and active eg "What is your name?" etc.

15.3.2 The procedure should state by whom the patient should be identified eg by the operator carrying out the exposure. The person with responsibility

for identifying the patient will be considered as an operator by this function, and as such subject to the Regulations.

15.4 **"Procedures for making enquiries of females of child-bearing age to establish whether the individual is or may be pregnant or breast feeding"**

15.4. It is recommended that such procedures include the age range of individuals who should be asked about pregnancy or breast feeding. In setting this age range, consideration should be given to the increased period of reproductive capacity due to earlier maturity and advances in technology.

15.5 **"Procedures to ensure that the probability and magnitude of accidental or unintended doses to patients from radiological practices are reduced so far as reasonably practicable"**

15.5.1 The employer should include within standard operating procedures a requirement that all practical aspects should be conducted with due regard to minimising unintended doses to patients. This is particularly relevant in radiotherapy e.g. treatment plans should be produced with due regard to the most effective treatment delivery and the potential for error.

16 ADEQUATE TRAINING - SCHEDULE 2

16.1 Schedule 2 sets out details of the training which a practitioner or operator must have successfully completed in order to be permitted to carry out medical exposures or practical aspects under the Regulations. The Schedule is divided into two sections. Section A sets out subjects relevant to an individual's functions as practitioner or operator. Section B details subjects relevant to specific areas of practice. Not all the subjects listed in Schedule 2 have to be covered. The subjects of Schedule 2 that would need to be covered will depend on the range of exposures the practitioner or operator intends carrying out.

Appendix B

1 The Ionising Radiation (Medical Exposure) Regulations 2006 and 2011 Amendments

1.1 www.dh.gov.uk/health/2012/09/ionising-radiation-regulations

Appendix C

Audit Standard Table

CRITERION	STANDARD	EXCEPTION	ANNUAL AUDIT BY
REQUEST CARDS ONLINE Fully completed with regards to • demographic details • unit number • name printed • designation	100%	none	Radiology and Physiotherapy
Only requests as listed in Policy requested	100%	none	As above
Only patients >16 years (physiotherapy)	100%	none	As above
Radiographs requested only when clinically indicated	100%	none	As above

Appendix D

Emergency Nurse Practitioners Minor Injury Units (MIUs)

1 CRITERIA AND TRAINING

1.1 Radiographic requesting – the Emergency Nurse Practitioner will:

- Have undertaken a degree level education assessment and physical examination course
- Be assessed as competent by an appropriate assessor within their clinical speciality.
- Have signed the authorised referrers list kept in the radiology department (Taunton & Somerset Foundation Trust and Royal United Hospital)

1.2 Radiographic Interpretation – (Interpretation refers to the understanding and explanation of a test result).

The Emergency Nurse Practitioner will:

- Have completed requester training as outlined above.
- Have undertaken a course in radiographic interpretation that is acceptable to Somerset Partnership NHS Foundation Trust
- Have all criteria as per the relevant job description including a relevant Emergency Nurse Practitioner course at level 3 or above (if a post graduate ENP trainee will have completed approved educational programme)
- Ensure that the results of any radiographic investigations are communicated clearly to the patient
- Ensure all formal radiographic reports are received, signed and cross referenced to the patients' MIU clinical record
- Attend mandatory Continuing Professional Development (CPD)

Appendix E

Physiotherapists, Podiatric Surgeons and Podiatrists working in Extended Roles in the Musculoskeletal Service

1.3 Radiographic requesting – the Physiotherapist/Podiatrist or podiatric surgeons will have:

- Signed the authorised referrers list kept in the radiology department
- Be considered clinically competent by the Professional Lead for musculoskeletal physiotherapy, Orthopaedic Assessment Services or Consultant physiotherapist regarding the assessment and differential diagnosis of musculoskeletal problems
- Attended a radiation protection lecture that covers IR(ME)R regulations (with evidence of attendance, e.g. course timetable or certificate of attendance)
- Regularly attended and received teaching at orthopaedic assessment clinics, Consultant orthopaedic clinics and/or MDT radiology meetings.
- Completed a non medical referrers form counter signed by a named consultant medical practitioner

1.4 Radiographic Interpretation (Interpretation refers to the understanding and explanation of a test result).

The Physiotherapist/Podiatrist or podiatric surgeon will:

- Have completed requester training as outlined above
- Have undertaken relevant training in radiographic interpretation that is acceptable to Somerset Partnership NHS Foundation Trust
- Understand that although the initial interpretation of the images may be made by the requester (i.e. the therapist) they will be formally reported on
- Ensure all formal radiographic reports are received, signed and cross referenced to the patients' clinical record.
- Ensure that the results of any radiographic investigations are communicated clearly to the patient

Appendix F

POLICY FOR EMERGENCY NURSE PRACTITIONER-REQUESTED X-RAYS IN ED AT THE RUH

CRITERIA

The Emergency Nurse Practitioner (ENP) acts on behalf of the Emergency Department (ED) Consultants but is accountable for his or her own actions.

A Registered General Nurse with experience of working in an ED.
Successful completion of the University based Practitioner course.

Ability to achieve satisfactory results when audited on his or her performance during x-ray requesting.

Agreement of Policy, signed by ED Clinical Director, Nurse Requester, and Radiology Clinical Director.

The Employer (RUH NHS Trust, Bath) must support this role and accept their share of the legal responsibility for you to request x-rays – you must provide evidence of this.

TRAINING REQUIRED

Completion of the IR(ME)R Referrers' Course: involving theoretical knowledge of the Ionising Radiations (Medical Exposures) Regulations 2000, the duties and responsibilities of the referrer, and an understanding of the risks involved with medical exposures.
(Provided by the Medical Physics Department)

Patient and Policy documentation (Provided by the Radiology Department).

Accountability (Provided by the ED Department).

Teaching on the examination and assessment of the injured limb.
(Provided by the A&E Department)

IRMER updates need to be completed 3 yearly by all staff requesting x-rays

ENP REFERRED X-RAY REQUESTS

Any requests made outside these Policies will not be accepted by the Radiology Department, and will be returned to the referring department.

Any request made to the Radiology Department without sufficient clinical information may be returned for discussion with the referrer.

REQUEST FORM

The following information must appear on the request form in clearly legible writing:

Patient Details	Name Hospital Number **Address** Date of Birth LMP for women of child bearing age
Referrers Details	Signature of nurse requesting Printed name and grade of nurse requesting Name of A&E Consultant
Examination	Site and side
Clinical Information	
Date of request	

THE ENP MAY REQUEST THE FOLLOWING EXAMINATIONS:

Finger	Swelling and/or deformity present. Bony tenderness The request must be made by identifying the particular finger & name eg, Right Index Finger
Hand	? # metacarpals Swelling and/or deformity present. Bony tenderness
Wrist	? # carpals/distal radius and ulna Swelling and/or deformity present. Bony tenderness
Scaphoid	Check for multi-dimensional tenderness, pressure over anatomical snuff box, thumb compression. Pressure over thenar eminence
Forearm	Obvious deformity present Bony tenderness
Elbow	Swelling and/or deformity present. Bony tenderness ? dislocation
Shoulder	? dislocation and/or deformity present ? # neck of humerus/ ? disruption of AC joint
Clavicle	Obvious deformity present. Bony tenderness. Swelling
Hip	? # Neck of Femur

	Obvious deformity present. Bony tenderness. Swelling Limping child with signs of hip pathology
Femur	Obvious deformity present. Bony tenderness. Swelling
Knee	Swelling and/or deformity present. Bony tenderness
Tibia & Fibula	Swelling and/or deformity present. Bony tenderness
Ankle	Follow Ottawa findings Avoid requesting both foot and ankle x-rays
Foot	? # metatarsal Swelling and/or deformity present
Toes	Deformity. Dislocation
Soft Tissue	History of radio-opaque foreign body in the appendicular skeleton ONLY Document site of entry

These examinations may be requested on patients > 1 year of age

NB CXR need not be requested as the examining Radiographer will follow Radiology Department Policies, x-raying if a fracture is seen on the initial films.

Facial Bones	Orbital trauma: penetrating or blunt injuries Middle third facial injuries: swelling and tenderness NB x-ray often unhelpful in children NOT for nasal trauma
OPG	For mandibular trauma: swelling and tenderness ? fracture
Foreign Bodies	For inhaled radio-opaque FB: CXR and soft tissue neck **only** For swallowed radio-opaque FB: Soft tissue neck and CXR only If FB is sharp or potentially dangerous eg, batteries: AXR
Cervical Spine	If found to be positive on the Canadian rules for C-spine clearance as ED Policy
Thoracic Spine	Swelling and/or deformity present. Bony tenderness. With mechanism that indicates possible bony injury.

Lumbar Spine	Swelling and/or deformity present. Bony tenderness. With mechanism that indicates possible bony injury.
Chest x-ray	Patients with a suspected chest infection Patients with a history of respiratory or cardiovascular disease Patients with shortness of breath Patients with a suspected pulmonary embolism Patients with a suspected lung malignancy Suspected gastric/intestinal perforation.
AXR	Patients with Ingested FB likely to cause perforation Penetrating FB in wall of abdomen ? Bowel obstruction.
Pelvis	Swelling and/or deformity present. Bony tenderness. With mechanism that indicates possible bony injury.

These examinations may be requested on patients > 1 year of age.

Notes:

All requests should be made following 'Making the best use of a Department of Clinical Radiology: Guidelines for Doctors' by the Royal College of Radiologists.

If in any doubt, do not x-ray without referral to a medical officer

According to the IR(ME)R Regulations, all x-ray films require a clinical evaluation by an appropriate clinician.

When to X-ray

If you are NOT convinced that there is a bony injury or foreign body DO NOT X-RAY**.**

Take a History

What was the mechanism of injury? Does it match the injury?

Look for: **Pain**
Stiffness
Swelling
Deformity
Disability

Examine

Expose the injured limb. Compare to the uninjured side if necessary.

Look	**Skin**	**Shape**	**Position**
Feel	**Skin**	**Soft Tissue**	**Bones**
Move	**Active**	**Passive**	

If obviously deformed and painful,

DO NOT PUT THE JOINT THROUGH A RANGE OF MOVEMENTS

Remember

Check for associated injuries:

- **Injuries to the ankle require clinical examination of the head of fibula and the foot**
- **When you suspect a wrist fracture, examine patient for scaphoid tenderness and injury to the elbow**

Requests made repeatedly outside this Policy, by an individual, will be reported and documented as an adverse incident according to trust policy.

Any change to the Policy must be agreed by the Emergency Department Clinical Lead and by the Radiology Clinical Director.

The Policy will then be amended and signed by the relevant parties.

……

Mr D Williamson

Clinical Director, Emergency Department

……

Dr S Malthouse

Clinical Director, Radiology Department

Appendix G

Taunton & Somerset NHS Foundation Trust
Trust Policy
Referral of Patients for Radiological Examinations

Introduction

The Ionising Radiation (Medical Exposure) Regulation 2000 IR(ME)R are now in force. Under these regulations there is now a legal responsibility for the employers to have procedures to identify individuals who act as referrers who are able to request x-rays. As there has been a change in practice and in particular extending the role of many health care professionals within the Trust, this has resulted in an increased number of non-medical practitioners requesting x-rays, ultrasounds, CTs and interventional procedures.

A referrer is a registered medical practitioner, dental practitioner or other health professional who is entitled in accordance with the employer's procedures to refer individuals for medical exposure to a practitioner.

Radiologists act as practitioners under the new IRMER legislation. This puts a legal responsibility on Radiologists to ensure that all medical radiation exposures are justified. The referrers have a legal duty to provide sufficient information on the request card. This must include previous diagnostic information and medical records relevant to the medical exposure. This is in order for the practitioner to decide on whether there is sufficient benefit as required under Regulation 6(1)(a).

Requirements of all referrals for X-ray and Nuclear Medicine Requests

It is a requirement under criminal law to complete requests accurately and include the medical justification for the examination. The referrer must satisfy themselves that the examination is justified on the basis risk versus benefit. Information on the examinations and their risks can be found on the Intranet under the Diagnostic Imaging section. The person signing the request form takes the responsibility for the requests contents.

Requests on High Risk, High Dose or High Cost Exposures

Only medical doctors and Health Professionals under direct instruction of a consultant may request these examinations. This includes CT, barium enemas, arteriograms and interventional procedures.

Plain Film Radiography

Any medical doctor may request these examinations.

Health care professionals who are not medical doctors must:-

(1) Work within the procedures agreed with the Clinical Director of Radiology.
(2) Have an appropriate knowledge of the medical condition for which they are requesting the examination.
(3) Have been adequately trained in the risks of radiation and the procedure for requesting x-rays.
(4) Be included on a register held by the Radiation Protection Adviser.

Over the past few years there are a number of health care professionals who have been permitted to request x-rays. The requests were initially under the direction of the supervising doctor and under specified schemes of work. These have included:-

- Surgical nurse practitioners
- Nurses on Parkside
- Cardiology Nurses
- A&E Nurse practitioners
- Physiotherapists
- Pre-op assessment Nurses in Orthopaedic/Pain and Surgery.

Currently there is no arrangement for GP practice nurses to request x-rays.

Duty of the Trust

- The Trust must keep a list of all qualified persons eligible to act as referrers. Non-medically qualified referrers must work under Policies and schemes of work laid down by the consultant they work for and the Clinical Director of Radiology. Each group of practitioners must only request examinations within their remit e.g. A&E nurse practitioners must only request appendicular skeleton views. This does not apply to paediatric/neo-natal requesters.

- The clinical details on the request card must be completed and signed by the approved referrer after examining the patient. Pre-signed request cards are not acceptable.

- Requests that originate from non-recognised referrers will not be processed and the examination not performed.

- Specimen signatures of all non-medical referrers must be available and updated regularly.

- Each Directorate should have knowledge of all those non-medical referrers within the Directorate. This needs to be updated when staff leave. New staff must have their status as referrers approved by the Clinical Director of Radiology and the Trust. Non-medical referrers are approved for specific referral criteria. Approval as referrers is not transferable should they change posts.

- Audit should be performed to ensure that the clinical details provided are accurate and relevant.

- Non-medical practitioners requesting x-rays must undergo appropriate training. This may be organised by the Diagnostic Imaging Department or done by using software training packages.

- Inclusion on the Trust register will indicate that training has been deemed adequate by the Trust management.

- Dr J M Bell Clinical Director – Diagnostic Imaging

20th June 2006 Review date: June 2007

Radiation Protection Adviser	Radiology Director	Trust Clinical Risk Manager
Mr Richard Bovill	Dr Jonathan Bell	Mr Stephen Thompson

Appendix H

Standards for the Reporting and Interpretation of Imaging Investigations

https://www.rcr.ac.uk/.../standrads-reporting-and-interpretation-imaging-investigations