

THE COLLEGE OF  
RADIOGRAPHERS



RADIOGRAPHY

**PROFESSIONAL  
STANDARDS TO BE  
ACHIEVED IN  
DIAGNOSTIC  
IMAGING,  
RADIOTHERAPY AND  
ONCOLOGY**

*Archive*

THE SOCIETY OF  
RADIOGRAPHERS



**PROFESSIONAL STANDARDS TO BE ACHIEVED IN  
DIAGNOSTIC IMAGING, RADIOTHERAPY AND ONCOLOGY**

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## 1. BACKGROUND

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The College of Radiographers is the professional body for radiographers in the United Kingdom, and the Republic of Ireland; it has a duty to advise, provide guidance and support radiographers working in diagnostic imaging, radiotherapy and oncology. Radiographers practise in a number of settings ranging from NHS Trusts and the community to the private sector. In each instance radiographers will strive to deliver a high quality service for their patients and on occasions do so under the most difficult of conditions.

In a service where there is an ever increasing demand on resources, difficult choices may have to be made which could influence the quality of the service being offered. It is in the interest of patients, managers and professional staff that the service is of the highest quality. Individual practitioners have a duty to their patients to have due regard to their professional code of conduct when undertaking an examination or treatment. It is vital therefore that a practitioner is not put in a position where his /her professional role in dealing with patients is compromised. Indeed, practitioners must work within their statutory obligation and it is no defence to claim that departmental working practices remove professional responsibility from the individual. It is for this reason that departmental policies need to recognise those conditions and practices which provide the means of developing and maintaining quality service and thus removing any conflict which could arise between practitioners and managers. The College of Radiographers, in meeting its obligation to the profession, presents this document as a statement of policy presenting the requirements necessary to provide professional standards of care with respect to diagnosis, treatment, radiation protection and all aspects of patient care.

The document emphasises the need for departments to have a written operational policy and to set standards so that radiographers can practise with the confidence that radiation dose to the patient is kept as low as possible consistent with appropriate diagnostic or therapeutic results.

## **OPERATIONAL POLICY**

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Departments must have a written operational policy which embraces all aspects of the radiographer's work. The working environment must be safe and comply with all statutory requirements such as the Control of Substances Hazardous to Health (COSHH) Regulations and the various ionising radiation regulations. The following section identifies those areas which need to be covered.

1 The standards given in The Patient's Charter, including waiting times and the patient's right to information, together with local and quality standards, should be incorporated into the standards outlined in this document. Examinations utilising ionising radiation must be undertaken by professionally qualified competent staff. All radiographic and therapeutic radiography must be carried out by state registered radiographers; other imaging techniques must be carried out by appropriately qualified, skilled and competent staff. For example, in ultrasound the appropriate qualification is the DCR or degree in radiography plus training and experience in the speciality to a level such as the Diploma in Medical Ultrasound or a postgraduate diploma in medical ultrasound accredited by the Consortium for the Accreditation of Sonographic Education (CASE).

2 All work must be monitored and verified in order to provide an efficient audit system. This implies the need for all departments to have appropriate information technology and relevant support to ensure effective management.

3 Dose reduction to the effect that the dose to the patient is kept as low as reasonably achievable (ALARA principle). An operational policy should ensure that the department will work constantly towards dose reduction. This must be audited and the means of audit specified.

4 There should be an agreed protocol for reporting and interpretation of image quality where radiographers have a direct role.

5 There should be recognition of agreed referral sources, e.g., registered medical and dental practitioners, podiatrists, chiropractors.

6 There should be a locally determined technique protocol in all imaging departments. This should cover such areas as the projections to be taken as standard and the parameters used to achieve them.

7 There should be a locally determined treatment protocol in all radiotherapy departments.

8 There should be protocols concerning all aspects of health and safety including relevant ionising radiation regulations.

9 There should be due regard to quality assurance including safety, inspection and testing of equipment and the quality assurance procedures.

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10 There should be rigorously defined emergency procedures.

11 There should be a comprehensive staff training and development strategy.

12 There should be a clear policy on information issued to patients and carers.

13 There should be declared policy on waiting lists and times and acceptable time limits. Agreed acceptable time limits should be made available to patients and reasons given for non-adherence. These should conform with national standards, i.e. The Patient's Charter standard, and quality standard.

14 All staff should be aware of the professional responsibilities of every person in the department to keep themselves updated with respect to equipment/ techniques and dose reduction methods and their responsibility to press for these to be introduced into departments.

15 There should be regular review and replacement of equipment.

16 There should be declared and unambiguous acceptable levels of care for patients including staff relationships with patients, standards of waiting room accommodation and facilities.

17 There should be a programme of research work (within the department) and regard to ethical standards.

### **Out of Hours Work**

18 Where out of hours work is carried out there should be a separate policy.  
Students

### **Students**

19 Where students are working in the clinical department there should be a separate policy which has been agreed with the education institution responsible for education and training.

## **DETAILED GUIDELINES FOR DEVELOPING OPERATIONAL POLICY AND PROFESSIONAL STANDARDS TO BE IMPLEMENTED IN DIAGNOSTIC IMAGING, RADIOTHERAPY AND ONCOLOGY**

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### **PHILOSOPHY AND AIMS**

The aim of the diagnostic imaging, radiotherapy and oncology service is to provide the client (referring clinician or purchaser unit) with a high quality of service. The service must ensure safe and effective patient care which complies with the relevant statutory instruments and in particular current regulations controlling the use of ionising radiation which will enshrine the principle of the lowest possible dose consistent with diagnostic or treatment needs. Development and implementation of a policy which embraces the standards below can only give purchasers of the service confidence that the service is of the highest quality.

### **OVERALL STANDARDS**

The following specific objectives of the service should be laid down in writing. The need for:

- a. provision and maintenance of a high quality of care through professional audit and a quality assurance programme;
- b. provision of the service on a routine, regular and emergency basis;
- c. consultation with medical, professional and nursing staff concerning the provision of the service and care;
- d. conduct of professional activities in accordance with standards set by the relevant professional organisations;
- e. research into diagnostic and therapeutic radiography practices, the implementation of new tests and improved techniques after appropriate evaluation;
- f. compliance with locally formulated health and safety rules and schemes of work;
- g. compliance with health and safety legislation including the ionising radiation regulations;
- h. access to diagnostic imaging services required for patient care but not provided by the health authority;
- i. all staff to be aware of the specific objectives of the service.
- j. All objectives to be reviewed annually and revised and dated accordingly where necessary.

## STANDARD 1

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### 1. ORGANISATION, ADMINISTRATION AND RECORDS

The service is organised to provide a safe environment for patients and staff and a safe and effective service to patients. To achieve the standard the following policies are observed.

#### 1.1 Organisation and Administration

1.1.1 The service is provided by a multi-disciplinary team of qualified radiologists or radiotherapists, state registered radiographers, nursing staff, support workers, secretarial and clerical staff.

1.1.2 The service is medically directed by a qualified radiologist or radiotherapist and operationally managed by a state registered radiographer.

1.1.3 There is a current written organisational chart which shows lines of authority and responsibility and accountability.

1.1.4 Senior professionals from each of the disciplines providing the service should be involved in the planning, management and justification of the service's budget and resources and have direct access to senior management.

1.1.5 The operational manager and the clinical director (or equivalent) need to receive regular, accurate and appropriately apportioned statements of current expenditure and resource utilisation.

#### 1.2 Records

1.2.1 Reports from imaging examinations or treatments are filed in the patient's medical records within a specified time and a duplicate record is kept on file in the department or in some other accessible storage system. (When cumulative or serial reporting systems are used the role of the original and duplicate reports is reversed.)

1.2.2 Films or other hard copy images are made for all investigations except where it has been agreed that this practice is inappropriate.

1.2.3 Films, records and treatment plans and prescriptions are kept in accordance with at least the minimum statutory requirements.

1.2.4 Films, records and treatment plans and prescriptions are stored using the accepted hospital coding system.

1.2.5 The coding system facilitates retrieval of films, records and treatment plans and prescriptions.

## STANDARD 2

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### 2 POLICIES AND PROCEDURES

The service has dated, written policies and procedures based upon current knowledge and principles to provide the framework for the service to accomplish its objectives. To achieve the standard the following policies are observed.

2.1 The policies and procedures are developed jointly by representatives of the professional staff who provide the diagnostic imaging and interventional service/radiotherapy service.

2.2 Policies and procedures are reviewed and up-dated annually and dated accordingly.

2.3 All staff are made aware of current policies and procedures and follow them in all activities.

2.4 Diagnostic imaging and interventional procedures are performed and radiotherapy treatment given, only upon written request by an approved referral source. The request contains sufficient clinical information to justify the examination or treatment.

2.5 All images are interpreted and reported on in accordance with an agreed system of work.

2.6 A manual of guidelines for requesting diagnostic imaging and interventional procedures/planning and treatment is distributed to all members of the medical staff.

2.7 Departmental protocols relating to all imaging and interventional procedures/planning and treatment are available within the department.

2.8 A manual of administrative procedures is maintained and provided for all staff, to include:

2.8.1 information required to enable a referral to the department;

2.8.2 conditions necessitating notification of the attending clinician;

2.8.3 imaging examinations in areas other than the diagnostic imaging and interventional department;

2.8.4 administration of contrast agents and associated drugs by paramedical personnel;

2.8.5 treatment of anaphylactic response to drugs;

2.8.6 scheduling, including staff timetables, appointments and access policies for clinicians;

2.8.7 care of patients who have special needs, e.g., those with diabetes and those with allergies, including those who are critically ill and those needing isolation precautions; information issued to patients and carers; health and safety; the ionising radiation regulations and the role of radiation protection supervisors.



- 2.8.8 information issued to patients and carers;
- 2.8.9 health and safety;
- 2.8.10 the ionizing radiation regulations and the role of radiation protection supervisors.

## **STANDARD 3**

### **3 STAFFING AND DIRECTION**

The service is directed and staffed to achieve its stated goals and objectives. To achieve the standard the following policies are observed.

3.1 The service is medically directed by a qualified radiologist/radiotherapist and operationally managed by a state registered radiographer.

3.2 A radiologist/radiotherapist and state registered radiographers are on duty or available at all times.

3.3 All radiographic procedures are conducted by state registered radiographers.

3.4 The service is staffed by qualified radiologists/radiotherapists, state registered radiographers, nursing staff, clerical staff and support workers, for the number of investigations or treatments performed.

3.5 Diagnostic images are interpreted and reported upon by qualified radiologists or state registered radiographers working in accordance with an agreed system of work. In such situations where interpretation is not or cannot be provided this is identified and an appropriate protocol agreed by management and the referring clinician.

3.6 The radiologist/radiotherapist or, in the absence of a qualified radiologist/radiotherapist, the state registered radiographer, consults with the responsible practitioner immediately when there are critical or unexpected findings.

3.7 The hospital is advised by a radiation protection adviser.

3.8 A state registered radiographer is appointed as radiation protection supervisor for each department.

3.9 There is a current, written organisational chart which clearly states lines of authority, responsibility and accountability within the department and in relation to the hospital. The organisational chart is reviewed annually and revised and dated whenever:

- 3.9.1 staffing patterns are altered;
- 3.9.2 the service is restructured.

3.10 Written and dated job descriptions are available for posts, which specify at least the following:

- 3.10.1 job title and grade;
- 3.10.2 qualifications and/ or experience required for the post;
- 3.10.3 functions, responsibilities and accountability.

3.11 Job descriptions are reviewed annually, revised and dated as necessary with any changes to be agreed with the post holder.

3.12 All staff receive a contract of employment on appointment which states clearly terms and conditions of service.

3.13 On commencement of duties, all staff are given a comprehensive orientation and induction programme, which is part of continuing education and development (see Staff Development and Education in next section).

3.14 A documented staff development and appraisal system exists for staff, based on the job description and work objectives, which identifies strengths in performance, areas for development and education needs.

3.15 Regular multi-disciplinary staff meetings are held to maintain good communications and to review service practices.

## **STANDARD 4**

### **4 STAFF DEVELOPMENT AND EDUCATION**

There is a programme to facilitate the development of each individual within the department, and to encourage training and development on issues relevant to the service and the objectives of the hospital. To achieve the standard the following policies are observed.

4.1 There is an orientation and induction programme for all staff appointed to the department. The programme:

- 4.1.1 introduces new staff to the relevant aspects of the hospital;
- 4.1.2 introduces new staff to the relevant aspects of the department;
- 4.1.3 explains the organisational structure within the department and within the hospital;
- 4.1.4 prepares staff for their role and responsibilities;
- 4.1.5 explains lines of authority both within the hospital, unit and department;
- 4.1.6 explains the method used to evaluate staff performance;
- 4.1.7 introduces staff to the policies and procedures of the service and the hospital;
- 4.1.8 provides information on the occupational health service offered to staff.

4.2 All staff of the department are proficient and kept up to date in Basic Life Support including:

- 4.2.1 management of the airway;
- 4.2.2 control of bleeding;
- 4.2.3 performance of expired air resuscitation;
- 4.2.4 performance of external cardiac massage.

4.3 All staff of the department are proficient and kept up to date with legislation governing lifting techniques.

4.4 All the staff of the department are aware of the need to provide a courteous and considerate service to patients and their carers, including the need to respect privacy and respect and cater for cultural and language difficulties.

4.5 Where appropriate the continuing education programme is linked to performance development and appraisal. Each individual agrees educational needs with the appropriate manager, which include the individual objectives and time scale for achievement.

4.6 The continuing educational programme:

- 4.6.1 uses professional and other resource material;
- 4.6.2 supports and encourages relevant research;
- 4.6.3 provides information on advances in practice related to the department and the particular speciality;
- 4.6.4 provides information on educational opportunities offered by a range of institutions;
- 4.6.5 provides orientation to new clinical areas.

4.7 Information and library services are available within the hospital or access is provided to outside facilities.

4.8 Where appropriate the department facilitates the attendance of staff at relevant conferences, meetings or seminars. Records of attendance are kept by the operational manager of the department.

4.9 A library of diagnostic images and treatment protocols is maintained for educational and teaching purposes.

## **STANDARD 5**

### **5 FACILITIES AND EQUIPMENT**

The department is provided with space, suitable equipment and adequate supplies for the safe performance of all services provided. To achieve the standard the following policies are observed.

5.1 Radiation safety measures are developed in consultation with all professional staff involved in delivering the service and in consultation with the radiation protection adviser.

5.2 The implementation of radiation safety measures is supervised by the radiation protection supervisor.

5.3 Personnel working with equipment emitting ionising radiation must wear suitable radiation monitoring devices.

5.4 Monitoring devices are assessed periodically and records of results are kept. Results are made available to all staff concerned.

5.5 All staff are given instructions in safety precautions necessary for the protection of patients and staff.

5.6 There is evidence that all rooms and equipment are assessed for safety at acceptable intervals by independent radiation experts. Records of assessment are kept.

5.7 There are suitable signs, prominently displayed, warning of radiation dangers to the fetus. Where appropriate these should be multilingual.

5.8 Due attention is paid to product liability with respect to loan, purchase, modification or sale of equipment.

5.9 Safety measures include safety precautions against electrical and mechanical hazards, fire and explosions as well as against radiation hazards.

5.10 All newly installed equipment is acceptance tested to ensure it meets agreed specification.

5.11 All equipment is subject to a planned maintenance programme in accordance with HEI (98) 1990/ revised 1991, Management of Medical Equipment and Devices.

5.12 All equipment and facilities conform to existing Health and Safety Regulation (HC(87)3), Health and Safety at Work (in Wales WHC (87)8).

5.13 Calibration of equipment and all safety measures followed are in compliance with statutory regulations.

5.14 Access to departments is signposted clearly throughout the hospital.

5.15 There is suitable access and facilities provided for the disabled.

5.16 All areas are to be kept decorated and to a high standard.

5.17 High levels of cleanliness are to be achieved and to be monitored carefully.

## **STANDARD 6**

## 6 EVALUATION AND AUDIT

The service must ensure the provision of high quality care by its involvement in evaluating activities of the hospital and the department. For this purpose a peer group structure exists for performance of evaluation activities. To achieve the standard the following policies are observed.

6.1 The evaluation programme should include the review of at least the following:

- 6.1.1 the service and/ or department in comparison with standards set out in this chapter;
- 6.1.2 the performance of all staff;
- 6.1.3 the evaluation of clinical and professional performance, encouraging a multi-disciplinary approach (clinical professional audit);
- 6.1.4 incidents and accidents;
- 6.1.5 use of diagnostic and therapeutic resources;
- 6.1.6 waiting lists;
- 6.1.7 waiting times.

6.2 Evaluatory activities to include the following elements:

- 6.2.1 meetings held on a regular basis to identify areas of importance or interest, or to discuss particular incidents, e.g. quality circles;
- 6.2.2 recording attendances and minuting evaluation meetings which reflect accurately conclusions, recommendations, action taken and results of action.

6.3 Confidentiality is maintained throughout evaluation proceedings.

6.4 The relevant staff receive a report of results obtained through evaluation of care and/ or service and participate in the formulation of plans for improvement.

6.5 There is a mechanism for making and dealing with complaints/suggestions from patients, their carers, visitors and staff, which is known to all.

6.6 Incident reports/complaints/suggestions are compiled, recorded, investigated and discussed at an appropriate level within the hospital.

6.7 Relevant statistics are collected and properly reviewed.

6.8 Information is collected on key areas as appropriate to include:

- 6.8.1 waiting time for appointments;
- 6.8.2 number of attendances;
- 6.8.3 time spent in the department;
- 6.8.4 follow-up;
- 6.8.5 referral;
- 6.8.6 use of investigations;
- 6.8.7 patient satisfaction;
- 6.8.8 equipment failure.

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6.9 Where research is undertaken the medical and professional staff ensure that the patients' rights are protected.

## **STANDARD 7**

### **7 OUT OF HOURS WORK**

Where the department undertakes out of hours work there is a specified departmental policy known to all staff.

## **STANDARD 8**

### **8 STUDENTS**

Where the hospital provides clinical education and experience for students and trainees:

8.1 there is a written agreement between the hospital and the education institution, detailing the responsibilities for induction, supervision, monitoring and evaluation of students and trainees;

8.2 there is a written policy for informing patients of their rights concerning the involvement of students in their examination or treatment.



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