A strategy for the education and professional development of radiographers
A strategy for the education and professional development (EPD) of radiographers\(^1\)

**PURPOSE**

The purpose of this strategy paper is to set out principles that should underpin the future education and professional development framework for radiographers\(^1\) to enable continuous improvements in the delivery of patient services.

**RATIONALE**

The modernisation of the Health Service is dependent upon the development of a workforce capable of delivering high quality, patient centred care. Practitioners\(^2\) in both clinical imaging and radiotherapy services are key members of the inter-professional health care team engaged in such care. It is, therefore, essential that those practitioners re-define their roles to embrace innovative ways of providing services to the benefit of patients and the Service.

This new strategy is set within the context of Service and Education developments, recent and proposed changes to legislations and is based on the College’s vision of more structured arrangements for health service accreditation to include the accreditation of all practitioners.

The strategy promotes widening access to the profession; flexible career pathways to include the development of new roles. The strategy recognises the need to extend the recruitment pool and to ensure that highly skilled professionals are retained within the clinical setting but aims to be flexible enough to accommodate various career pathways. It also advocates that pre and post registration education and professional issues are addressed within strong education and service partnerships that support continuing responsiveness to service developments. In order to best protect the public, the strategy envisages a broader more collaborative working relationship between the professional body, the Health Professions Council and other agencies involved in the accreditation of radiography programmes that prepare practitioners for all levels of practice. A system of accreditation and registration of all practitioners is advocated.

This new strategy will build on and extend the principles outlined within *A Degree Rationale* (1989) and should be read in conjunction with the existing *Strategy for Education and Professional Development for Therapeutic Radiographers (EPD)*, 2000 and the recently published position paper on *Clinical Career Development in Radiography - A Position Statement*, 2001.

---

\(^1\) Radiographers in this context refers to all state registered professionals currently practising in diagnostic imaging and radiotherapy services to include all radiographers from the various imaging modalities and radiotherapy fields of practice.

\(^2\) Practitioner is defined in this document as a professional or practical worker in healthcare.
POLICY CONTEXT

Current Government policies and their supporting legislation outlines a commitment to the modernisation of Health Services and the education and training of staff that deliver those services. Key elements include cohesive patient focussed service delivery; continuous quality improvement through accreditation whilst embracing flexible and accessible education; promoting learning and career-long development in an environment that promotes inter-professional evidence-based practice and increasing capacity and skills mix in order to deliver targets. The objectives are to ensure transparency accountability and safety by changes in roles based on care systems, pathways and protocols. A national project has already commenced to evaluate a related radiotherapy skills mix envisioned within the College’s EPD strategy for therapeutic radiographers. A similar project is being undertaken for mammography practitioners. Both projects anticipate a change in the nature of the current workforce and correspondingly a revised career structure for existing radiographic staff to ensure continuous quality improvements.

Rising demand for radiography services combined with recruitment and retention issues have led to increasing staffing pressures. Recent consultations have indicated a need for the professional body to be more involved in suggesting and co-ordinating appropriate solutions. It is acknowledged that any proposals to change the nature of the workforce are likely to have a significant impact on current education and training, including the infrastructure that supports the development of clinical skills and competencies throughout the practitioners’ life.

THE WAY FORWARD

The College of Radiographers (CoR) recognises its responsibility for setting, maintaining and raising professional and educational standards; approval of courses that grant professional accreditation; and overseeing and co-ordinating the design, delivery and quality assurance of professional education and training. The College is also aware that it must act positively to manage the mechanisms that promote and support intellectual and skills development and the life-long learning of all practitioners in radiography.

In issuing this strategy the College wishes to encourage and offer support to radiography departments in Higher Education and practitioners working in radiography and radiotherapy services to respond innovatively to the challenges of delivering modern radiography services. In so doing, the College is primarily concerned that the quality of education and training leading to accreditation to practice including the facilities for education and training meets agreed standards and that any initiatives are adequately resourced.

To progress this strategy the College will collaborate with institutions on the basis of providing joint validation and accreditation of practitioners, and facilities where relevant. Further, the College will work collaboratively with the Health Professions Council and other relevant accreditation agencies to deliver comprehensive and responsive validation and accreditation services.
THE STRATEGY

The College of Radiographers envisage that the principles outlined within the strategy will enable institutions to develop a holistic framework for education and professional development of radiography practitioners. It envisages that such a framework will include a portfolio of co-ordinated courses that enable practitioners to prepare for, and regularly update their clinical practice to be able to function effectively within inter-professional teams and ensuring flexible career development pathways throughout the practitioners’ life. The strategy is built on a premise of close collaborative working between and within education institutions in response to service requirements.

Specifically the strategy:

- Promotes inter-professional academic and clinical skills development that protects the public through safe working practices;
- Advocates a system of registration and accreditation processes supported by a national database of practitioners;
- Demands formal validation and accreditation of learning wherever it takes place and the regular monitoring and evaluation of outcomes;
- Promotes the design of educational programmes that enables accredited modular progression within and between recognised qualifications with awards on exit;
- Advocates a learning environment that supports the development of cadet, healthcare assistants and other clinical support posts as an entry route to the assistant radiography roles;
- Confirms the Bachelor’s degree or its equivalent as the minimum qualification for professional practice as a State Registered Radiographer;
- Promotes alternative pathways to state registration and professional practice such as Accelerated BSc (Hons) and Postgraduate Diploma/Masters Degrees, in-service programmes, direct entry etc;
- Confirms that radiography practice is grounded in clinical skills and competency;
- Defines a structured preceptorship period with specified goals for new registrants to professional practice;
- Affirms a clear expectation that each state registered professional carries a responsibility for practice supervision and clinical teaching and learning;
- Advocates structured life-long learning to include both formal, informal and specific post registration education and research programmes at Masters and PhD levels to support higher/advanced and consultant level clinical practice;
- Recommends that academic and clinical skills within professional qualifications must be aligned with relevant national occupational standards and standards of proficiency;
- Promotes the maintenance of professional standards;
- Recognises the need for evaluation of new ways of working models to ensure that the consistency and quality of patient centred care is maintained and enhanced;
- Harmonises the strategy with the negotiating and bargaining infrastructure offered by the organisation to support career development.
The ladder of education and professional development above demonstrates:

- Flexible pathways for educational and career development through APEL;
- Matches education, professional career and lifelong development to service needs in conjunction with personal aspirations;
- Capitalises on opportunities within the changing context of health care.
CLINICAL ROLES AND RELATIONSHIPS

Effective implementation, development and future management of this strategy depends on strong partnerships and good communication between all the various stakeholders and the profession each working together for the benefit of patients.

Assistant practitioner

The scope of practice in radiography spans the life cycle of the population and the extremes of health and includes examinations and/or treatment procedures of varying levels of complexity. Typically assistant practitioners in radiography will be clinically competent to provide support to state registered diagnostic and radiotherapy practitioners and to undertake a range of examinations or treatments, to include patient care, under the supervision of those state registered practitioners. It is envisaged that the scope of practice for assistants in these settings will be limited to patient groups that have been defined as low dependency and examinations and/or treatment procedures that are defined as uncomplicated by all concerned and in accordance with local criteria. The assistant practitioner will carry a clinical portfolio that demonstrates his or her range of competencies.

The College will work closely with education providers and the Service to define flexible education and training pathways for the development of assistants. It is envisaged that such education and training will be to a level that is equivalent to a Higher Education Institution (HEI) certificate and/or diploma/foundation degrees and will incorporate a vocational qualification equivalent to an S/NVQ level 3. The exit award will clearly demonstrate the attainment of clinical competence informed by the relevant occupational standards.

Such assistants would be recruited from a diverse range of backgrounds, including age, education, employment and culture to meet local needs. The speed at which an individual recruit can acquire assistant status will vary depending on the individual and the amount of education input required to attain a specified level of competence. In addition, the ratio of employed assistants to state registered practitioners at various levels of practice must be aligned to local service needs and should be in accordance with best practice guidelines.

Smooth conversion from assistant to professional practice, as a state registered practitioner will be via an accredited programme of education and training that satisfies the requirements of the relevant regulatory, professional and other relevant bodies.

State registered practitioner (Preceptorship period)

State registered practitioners in radiography (SRP) will be competent to practice at registration and it is intended to link these competencies to relevant occupational standards and standards of proficiency. However, it is recognised that newly qualified SRPs experience role transition anxieties and require additional support to develop into confident practitioners, especially if they move to a different setting on qualifying. A period of preceptorship will be introduced to promote independence and confirm good clinical practice in a variety of situations and settings.
The philosophy of preceptorship is to enable the newly qualified SRP to consolidate knowledge (educative), to be inducted into the policies and procedures of the workplace (normative) and to reflect on their practice, especially on challenging experiences (restorative). At the end of the preceptorship period SRPs should feel confident about engaging with regular clinical supervision/mentorship throughout their careers.

During the period of preceptorship it is expected that SRPs will work with their preceptor for a specific period of time during the working week. The period of preceptorship is not time limited but is the subject of a learning agreement that sets out mutually agreed goals in relation to decision making and know how in the context of departmental protocols for clinical imaging/treatment delivery and patient care. Preceptorship will end when preceptor, SRP and manager agree that goals have been attained. This whole process will be incorporated into the performance management systems already in place within departments.

**Advanced practitioner roles**

Advanced practitioners will encompass the above, and working at higher levels of practice will have developed knowledge and expertise in a specific field of radiography, radiotherapy or across traditional and non-traditional boundaries or across a broad spectrum of knowledge. They may assume responsibility for many clinical and medically related tasks previously only undertaken by medical practitioners.

They will be reflective, fully accountable practitioners with developed judgement and decision-making skills in their chosen field. They may contribute to research and will evidence its utilisation in practice. Advanced practitioners will give professional leadership in teamwork and be engaged in practice development, quality improvement and the support, teaching and supervision of colleagues.

They will contribute significantly to the clinical management of individual patient’s care. This may include, for example, giving opinions and writing reports in specialist or mainstream areas of practice.

The advanced practitioner may be involved in the development of practice, governance activities and aspects of management. They will demonstrate higher levels of skill and competencies providing a platform for progression to consultant roles.

---

3 Clinical supervision is a term used to describe a formal process of professional support and learning which enables individual practitioners to develop knowledge and competence, assume responsibility for their own practice and enhance consumer protection and the safety of care in complex clinical situations.

It is central to the process of learning and to the expansion of the scope of practice and should be seen as a means of encouraging self-assessment and analytical and reflective skills issues however it is not a managerial control system.
Consultant practitioner roles

Consultant practitioners are those who have achieved mastery of their field of practice and have an inspirational approach to the development of new skills and the identification of their own and others’ learning needs. They are able to foresee opportunities for service and professional development and act as agents for change, working across boundaries to enhance patient care. Consultant practitioners are strategic, independent, creative thinkers who are advancing research and education to enrich practice and who are using their skills to develop and advise others.

The characteristics of consultant’s posts are grounded in expert clinical practice, professional leadership and consultancy, education, training and development combined with practice and service development, research and evaluation.
Table A below summarises the proposed minimum standards that will be evidenced by practitioners at the various levels of practice.

<table>
<thead>
<tr>
<th>Level of Practice</th>
<th>Typically people here will, at a minimum, be competent…</th>
<th>Typically posts will include…</th>
<th>Typically people here will have been educated and trained to…</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assistants</strong></td>
<td>.. to provide support to practitioners and to undertake a range of routine examinations / treatments and patient care under the supervision of SRPs.</td>
<td>.. assistants</td>
<td>.. N/SVQ level 3 120-240 CATS accredited in conjunction with the relevant professional body with a commitment to continuing development.</td>
</tr>
<tr>
<td><strong>State Registered Practitioner</strong></td>
<td>.. to do the above, exercise reflective clinical judgement, assume professional responsibility for the assessment, planning and delivery of patient care and examination/treatment. They will liaise effectively with other professionals and supervise assistants, students and other staff.</td>
<td>.. newly registered SRPs, post preceptorship and established registered practitioners.</td>
<td>.. N/SVQ level 3/4 .. graduate or post graduate level qualification which confers eligibility for state registration and professional accreditation. .. a range of CPD activities including named accredited qualifications. .. engage with clinical supervision.</td>
</tr>
<tr>
<td><strong>Advanced practitioner</strong></td>
<td>.. to do the above, and be reflective accountable practitioners with developed judgement and decision making, teaching and team leadership skills in their chosen field. They will contribute to research and evidence its utilisation in clinical practice. They will contribute significantly to the clinical management of individual patient’s care, for example giving opinions and writing reports.</td>
<td>.. state registered practitioners working at higher levels of practice, perhaps in mainstream or specialist areas of practice or across traditional and non traditional boundaries.</td>
<td>.. N/SVQ level 4/5 .. above qualification in addition to relevant post graduate study up to and including masters.</td>
</tr>
<tr>
<td><strong>Consultant</strong></td>
<td>.. to do the above, and be expert, strategic, independent, creative thinkers who are advancing research and education for service development, able to negotiate and work across boundaries. To provide leadership and function as consultants to other practitioners.</td>
<td>.. consultants in primary, secondary or tertiary sectors.</td>
<td>.. in addition to the above doctorate level or its equivalent commensurate with standards proposed for recognition of the highest levels of practice.</td>
</tr>
</tbody>
</table>

Ref: NHS Executive (1997)
TEACHING, LEARNING AND ASSESSMENT

Decisions about the strategies and methods for teaching, learning and assessment are for institutions to determine, but must be embedded in the clinical competencies to practice at the required level and must demonstrate natural progression towards state registration and beyond. However, the arrangements must be justified and must satisfy the requirements of the Service and the various relevant accreditation agencies. All programmes must address the need for health and social care education for all staff to include communication skills and leadership.

CONCLUSION

Government has indicated clearly its concerns about health services and its determination to modernise arrangements to achieve better quality of life and improved outcomes for patients. This strategy is a robust and timely response, pivotal to meeting those concerns. It is designed to broaden the profile of the radiography workforce to meet the needs of the service whilst assuring the general public of the level of protection to which it is entitled. It will also extend and develop the skills and knowledge of the professional workforce, enabling them to offer patients a service which is rooted soundly in clinical and professional expertise, is evidence based and needs led, and able to respond positively to the ever changing context of health care.

This College’s vision is quality clinical imaging and radiotherapy workforces through strong partnership between the Service, education providers, professional bodies, regulatory bodies and any other relevant accreditation agencies.
REFERENCES AND BIBLIOGRAPHY

Audit Commission (1995) 
*Improving Your Image*, HMSO

Clinical Oncology Faculty Board (1998) 
*Radiotherapy Equipment, Workload and Staffing*, RCR

The College of Radiographers/CPSM (1996) 
*The Developing Role of the Radiographer: Issues Affecting the Future Curriculum*

The College of Radiographers (1989) 
*A Degree Rationale*, CoR

The College of Radiographers (1997) 
*Continuing Professional Development Strategy*, CoR

The College of Radiographers (1997) 

The College of Radiographers (1998) 
*National Occupational Standards in Clinical Oncology*, CoR

The College of Radiographers (2000) 
*A Strategy for Education and Professional Development for Therapeutic Radiographers (EPD)*, CoR

The College of Radiographers (2001) 
*Clinical Career Development in Radiography - A Position Statement*, COR

The College of Radiographers and Radiographers Board at CPSM (1999) 
*The Handbook of the Joint Validation Committee*, CoR

Colyer et al (1999) 
*The Practice and Process of Therapeutic Radiography: A Professional Perspective*, College of Radiographers

Comptroller and Auditor General (February 2000) 
*Educating and training the future health professions workforce for England.*
London: The Stationery Office

*The Review of the Prescription, Supply and Administration of Medicines.*
London, Department of Health

Department of Health (November 2000) 
*Meeting the Challenge: A Strategy for the Allied Health Professions.* Department of Health

Department of Health (1999) 
*Saving Lives: Our Healthier Nation.* London, Department of Health
Department of Health (1999)
*Making a Difference: Strengthening the Nursing, Midwifery and Health Visiting Contribution to Health and Healthcare.* London, Department of Health

Department of Health (2000)
*A Health Service of all the Talents: Developing the NHS workforce (CONSULTATIVE DOCUMENT)* London Department of Health

Department of Health (1999)
*Modernising Health and Social Services: Developing the Workforce,* Department of Health

EL (95) 27
*Education and Training in the New NHS,* NHS Executive

EL 95 (51) (1995)
*The Report by the Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales: A policy framework for the commissioning of cancer services.* London Department of Health

EL (95) 84
*Building on the Benefits of Occupational Standards and National Vocational Qualifications in the NHS,* NHS Executive

Faculty Board of Clinical Oncology / CoR (1999)
*Inter-professional Roles and Responsibilities in Clinical Oncology Departments* RCR

*UK Health and Healthcare Services: Challenges and Policy Options,* Healthcare 2000

HMSO (2000)
*The Ionising Radiation (Medical Exposure) Regulations 2000*
Statutory Instrument No. 1059 HMSO

King’s Fund (1997)
*The Workforce and Training Implications of the Calman/ Hine Cancer Report,* King’s Fund

Minister of State for Health (1998)
*Working Together: Securing a Quality Workforce for the NHS,* HMSO

NHS Management Executive (1993)
*A vision for the future. The nursing, midwifery and health visiting contribution to health and health care,* Department of Health

NHS. (July 2000)
*The NHS Plan: A Plan for investment, A Plan for reform.* NHS. UK

NHS (September 2000)
*The NHS Cancer Plan: A Plan for investment; A Plan for reform.* NHS. UK

NHS (August 2001)
*Modernising Regulations in the Health Professions* (consultation document)
NHS Executive (1997)  

QAA (August 2001)  
*Radiography Benchmarking Statement*

RCR/CoR/RCN (1999)  
*Skills Mix in Clinical Oncology*

Sheffield University (1998)  
*Exploring New Roles in Practice (ENRiP): Implications of Developments within Clinical Teams*

The Secretary of State for Health (1997)  
*The New NHS: Modern and Dependable,* HMSO

The Secretary of State for Health (1998)  
*A First Class Service: Quality in the New NHS,* HMSO

The Secretary of State for Health (1999)  
*Agenda for Change: Modernising the NHS Pay System,* HMSO

United Kingdom Central Council for Nursing (1999)  
*A Higher Level of Practice,* UKCC

Williams P & Berry J (1997)  
*Competence to Practise?* The University of Salford.

**WEB BASED INFORMATION**

The Bristol Royal Infirmary Inquiry (2001)  
The College of Radiographers
207 Providence Square
Mill Street
London SE1 2EW
Telephone: 020 7740 7200
Fax: 020 7740 7233
www.sor.org

The College of Radiographers is a limited company registered in England under Charity No: 1287383, and a registered Charity No: 272505.

Registered Office:
207 Providence Square
Mill Street
London SE1 2EW

March 2002