THE COLLEGE OF RADIOGRAPHERS

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# Clinical Education and Training:

## Capacity and Quality - Executive Summary

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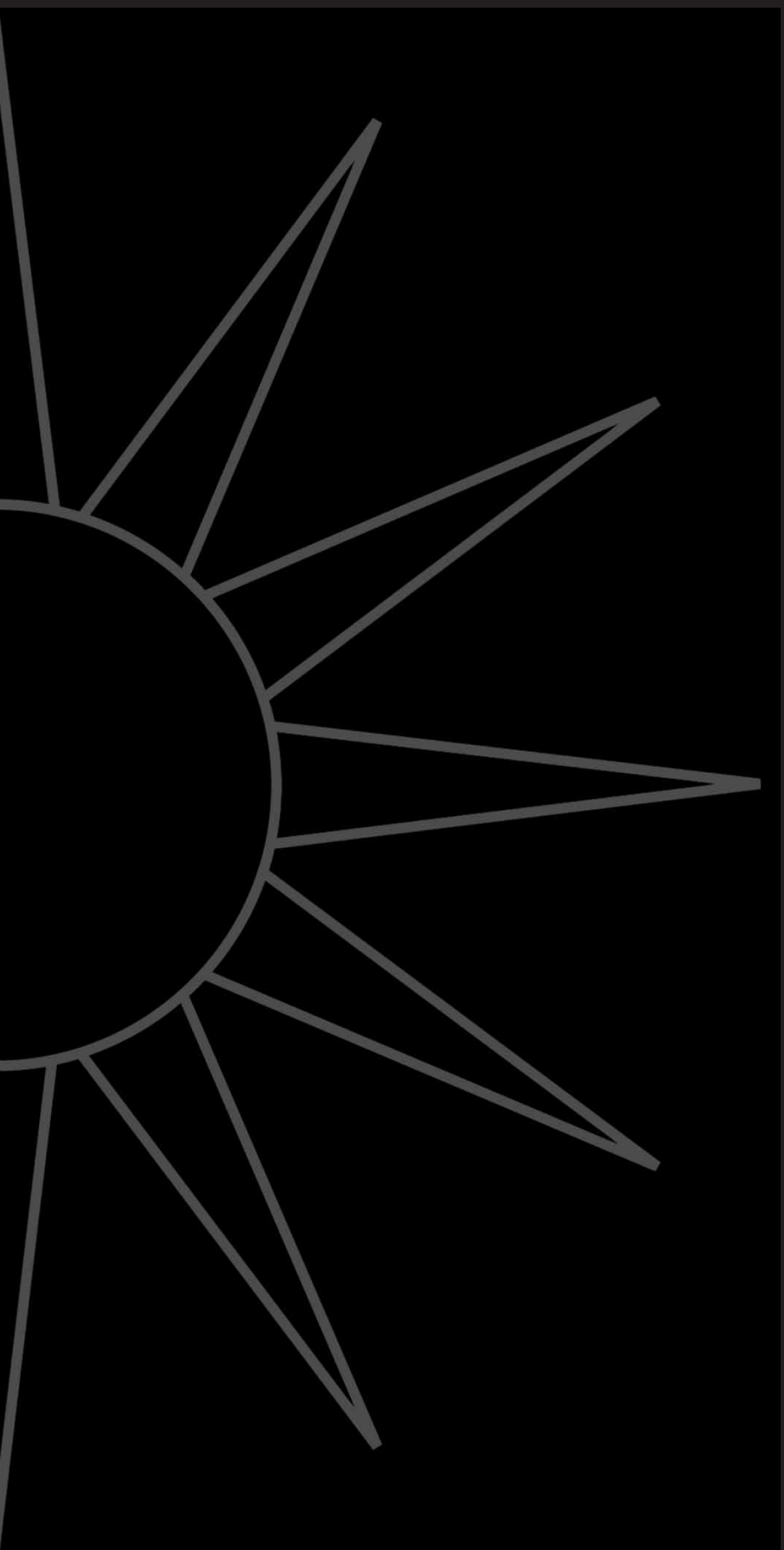

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# Clinical Education and Training: Capacity and Quality - Executive Summary

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## 1. Purpose of the project

1.1 This report presents the findings of a study commissioned by the College of Radiographers, with the support of the Department of Health (England). It has been completed during the implementation period for a range of strategies that are designed to meet ambitious targets arising from 10-year plans for the NHS across the United Kingdom (Department of Health, 2000a; Scottish Executive, 2000; National Assembly for Wales, 2000).

1.2 Education and training provided within diagnostic imaging and radiotherapy and oncology departments is fundamental to successful implementation of these strategies to recruit, retain and develop a workforce with the skills and knowledge to meet future service requirements.

1.3 The demand for learning and supervision in clinical departments is increasing at a time when high vacancy rates for radiographers are being reported in most parts of the UK. Factors contributing to this demand include changes in technology, increased recruitment of pre-registration students and the introduction of new ways of working and learning such as those associated with implementation of the four-tier structure – including assistant, advanced and consultant practitioners.

1.4 Within these constraints, clinical staff are required not only to provide a high quality, efficient and effective service for patients but also to meet the demand for supervision and support for an increasing range of learning and learners in the workplace.

1.5 This report highlights factors influencing the quality of, and capacity to provide, clinical education; provides evidence that the demand for clinical education exceeds current capacity and recommends actions to address the mismatch.

## 2. The study

2.1 Following a review of the literature and existing published data the study was designed in two phases:

a) A UK-wide survey of 26 Higher Education Institutions (HEIs) currently providing radiography programmes to explore the capacity of clinical placements, the demand for clinical education and training, and the strategies currently used to monitor the quality of clinical learning;

b) Workshops using a nominal group technique (NGT) conducted in eight locations across England, Scotland, Wales and Northern Ireland to identify factors affecting the capacity and quality of clinical education and training from the perspective of a range of stakeholders including clinical managers, educators, learners, and practitioners.

2.2 Responses to the survey were received from HEIs in England, Scotland, Wales and Northern Ireland and represented an overall return rate of 73 per cent. Analysis of the survey used descriptive statistics to portray the demand for clinical education and training and the capacity of departments to support learners.

2.3 A total of 92 individuals participated in the NGT workshops. Each group generated a list of factors affecting the quality and capacity of clinical education and training. A total of 131 individual factors were identified and, following content analysis, five main categories emerged: learning and teaching issues; staff attitude; resources; conflicting roles and responsibilities; and other external factors.

2.4 A review of the data by a small sub-group discriminated between the factors affecting capacity or quality. Only those factors for which there was a minimum of 80 per cent consensus by this group were included in the data analysis.

2.5 The following findings from the study apply across the UK, although regional variations, reflecting local issues, were found in the ranking of importance of specific factors.

## 3. Findings

### 3.1 Demand and Capacity

3.1.1 The demand for clinical placements and clinical education and training exceeds capacity. There has been a marked increase in demand for clinical education and training over the last three years largely due to an increase in recruitment of pre-registration students and the introduction of assistant practitioners.

3.1.2 There are also other groups of learners/students in the workplace who, although requiring less direct supervision and training, do require either time or other resources to support their development – those requiring supervised practice prior to registration (return to practice, international recruits); those undertaking postgraduate education and/or training in preparation for advanced practice or extended roles; and all staff participating in continuing professional development activities.

3.1.3 Demand for pre-registration clinical placements fluctuates throughout the year, suggesting that changes to patterns of placement experience may provide opportunity for some expansion in capacity. However, the greatest difficulty in meeting demand arises during the placement of students in the first year of their programme. It is of concern that HEIs find that this difficulty eases in subsequent years as a result of student attrition.

3.1.4 There is some scope for increasing placement capacity for pre-registration students within diagnostic imaging departments where extended working day or shift systems are implemented because these allow more flexible access for student exposure to the work in the department. There appear to be fewer opportunities to increase capacity in radiotherapy placements on the basis of current patterns of service delivery.

3.1.5 The majority of clinical learning for pre-registration students remains within acute NHS Trusts. There is little evidence of the routine use of either the primary care or the independent sector for the provision of learning opportunities.

3.1.6 A limited expansion of capacity has been achieved in diagnostic imaging through greater use of, for example, CT and ultrasound placements. Although previously regarded as “specialist”, such placements enable pre-registration students to gain a broader range of experience which reflects the mainstream use of these modalities.

3.1.7 There are a number of departments that are not used for pre-registration student placements currently. However, this apparent spare capacity arises where there is poor provision/resources for the support of student learning. Lack of suitable residential accommodation, remote geographical location of placement sites and inadequate facilities, such as IT to support learning, may all lead to under-utilisation of placements.

3.1.8 Currently HEIs use a variety of criteria to determine the capacity of placements to support pre-registration learners. These include minimum staffing levels, the number of treatment/examination rooms and the number of staff available to undertake defined roles such as mentor, assessor or clinical tutor to support clinical learning, teaching and assessment.

3.1.9 The use of workload to determine capacity is identified as more problematic because of the fluctuation in patient referrals, staffing and availability of equipment.

3.1.10 Whilst a high volume of work may appear to expand capacity by increasing the practical experience available to students/learners, the resulting role conflict experienced by radiographers has a significant impact on the availability of staff to provide supervision and support for learning.

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## 3.2 Quality and Capacity

3.2.1 There is often conflict between the roles and responsibilities associated with meeting workload demands and providing support for learning in the clinical department, particularly where staffing levels are reduced. This is identified as a major factor, which affects both capacity and the quality of learning in the clinical environment.

3.2.2 The study provides strong evidence that the attitude of staff toward learners and the motivation and ability to teach in clinical practice have a significant effect on the quality of learning. High standards of both clinical practice and clinical teaching are identified as essential in providing high quality education and training.

3.2.3 The support of suitably experienced staff as professional role models and staff with effective teaching skills are fundamental to the provision of high quality learning opportunities in clinical departments. The findings suggest that there is a range of teaching ability and skill available within departments, which, when combined with a lack of clear guidance regarding standards expected, is seen as detrimental to learning.

3.2.4 Good communication and effective feedback between HEIs and placement providers is highlighted as essential in ensuring that both students/learner groups and supporting staff are clear about the expected outcomes, the relationship between theory and practice and the criteria for teaching and assessment in the clinical department.

3.2.5 The departmental culture or ethos and general motivation to support learning are identified as key factors in the creation of high quality clinical learning opportunities.

3.2.6 Whilst many departments have adopted a pro-active approach to the development of life-long learning strategies, there is evidence to suggest that, in some, there is a lack of motivation and commitment to teaching among staff. Several contributory factors are identified: little support for staff from the employer; an absence of student training allowance; and poor job satisfaction.

3.2.7 Staff attitude to students/learners emerges as an important factor in enhancing the quality of learning experiences. The negative attitude of an individual member of staff toward a student/learner can have a profound effect on learning.

## 4. Summary of recommendations

From examples of good practice, issues raised, and the quality and capacity factors identified during the study, it is recommended that:

4.1 Learning is acknowledged as a core activity within diagnostic imaging and radiotherapy departments;

4.2 Funded staffing establishment within diagnostic imaging and radiotherapy departments reflects the contribution of staff time required to support clinical supervision, education and training;

4.3 HEIs, funding bodies and clinical managers, working together where appropriate, identify the local capacity available to meet the increased demand for clinical supervision, education and training arising from the:

- 4.3.1 increasing numbers of students/learners (undergraduate; postgraduate; and those returning to practice or undergoing periods of supervised practice);
- 4.3.2 introduction of new roles associated with implementation of the four-tier structure and particularly that of assistant practitioner;
- 4.3.3 increasing use of work-based learning and assessment;
- 4.3.4 CPD needs of all staff

4.4 HEIs review patterns of placement allocation for pre-registration students to optimise use of available capacity across the year and across the working day/week;

4.5 All staff are made aware of the evidence from the study which supports the view that negative attitudes towards students/learners results in poor quality learning in the clinical environment;

4.6 Attention is drawn to the professional responsibility of radiographers to teach and support learning in the clinical environment;

4.7 HEIs and imaging/radiotherapy departments move from a “liaison” relationship to one in which there is joint ownership of the development and *delivery* of education and training programmes to further develop a culture of shared responsibility for clinical education and student/learner support;

4.8 HEIs and imaging/radiotherapy departments establish and implement robust procedures to ensure that, where there is a breakdown in relationships between learner/student and supervisor or mentor, appropriate action is always taken;

4.9 HEIs work with current and potential clinical education providers to:

- 4.9.1 develop innovative learning opportunities by exploring, for example, use of placements in the primary care and independent sectors;
- 4.9.2 fully utilise available technology, where appropriate, to support learning;
- 4.9.3 facilitate the development of teaching and supervisory skills for professional practice from pre-registration level onwards;
- 4.9.4 audit both the quality and the capacity of clinical learning provision.

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