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### **Guest Editorial**

# Shortage of therapy radiographers: local problem or UK crisis?

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#### INTRODUCTION

Towards the end of 1998 the Radiotherapy Service Managers from Clatterbridge Centre for Oncology, Lancashire & Lakeland Radiotherapy Unit and Christie Hospital in the North West Region began to have serious concerns about the recruitment and retention of therapy radiographers in the region.

The concerns related to the difficulty in recruiting to vacant posts. The Society of Radiographers suggested that the problem was patchy and was, more than likely, a local problem. However, the number of advertisements and flyers coming to the three departments suggested otherwise.

In order to quantify the perceived problem it was decided to conduct a survey of all 62 radio-therapy departments (including those from the independent sector) and 17 education establishments in England, Scotland, Wales and Northern Ireland.

#### THE SURVEY

### Methodology

The investigation carried out in March/April 1999 was in two parts – a telephone survey of all radiotherapy departments and a written questionnaire to all education establishments. Current funded establishments for Wales, Scotland and Northern Ireland were obtained during the departmental telephone survey.

The NHS Executive North West are carrying out a review of Radiotherapy Services in England

for the Department of Health and supplied information regarding funded therapy radiography establishments at 31 March 1998.

# Radiotherapy Departments

The three Service Managers made phone calls to their counterparts in each of the other departments, asking the following questions:

- 1. As of 1 April 1999: how many therapy radiography vacancies did you have?
- 2. At what grades were these?
- 3. Do you think it will be easy to fill these posts?
- 4. How many part-time and job share therapy radiographers do you have not WTE but people.
- 5. Any other comments?

#### Education Establishments

Each of the education establishments were asked the following questions:

- 1. How many therapy radiography students are there in their final year?
- 2. How many were expected to graduate June/July 1999?
- 3. Are you aware of any shortages of qualified therapy radiographers in your region.
- 4. Any other comments?

### SURVEY RESULTS

## Radiotherapy Departments

All departments agreed to participate and there was a 100% response. There were 192 part-time and 83 job-sharing therapy radiographers. As of 1 April 1999 there were 167.31WTE vacancies reported at the following grades:

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- 8 × Superintendents
- 35.77 × Senior I
- 29 × Senior II
- 94.54 × Radiographer.

The best estimate of therapy radiographer posts at present is 1480 WTE. This data has been derived from two sources, which although a year apart, nevertheless give a good indication of the size of therapy radiography as a profession. The figures for Wales do not include the 21WTE approved posts for the North Wales Cancer Centre due to open in June 2000 and already recruiting.

Figures 1 & 2 show the proportional relationships between UK vacancy rates and establishments. They suggest a strong correlation between the distribution of vacancies when compared with that of whole time equivalent posts. They also indicate an even spread of vacancies throughout the UK.

## Education Establishments

Fifteen out of a possible 17 responded to the questionnaire. Information from the other two was solicited by telephone. There are 131 students expected to qualify in July 1999.

The departments and education establishments raised a number of general points:

- 1. Most departments expect to recruit from students graduating this year and certainly students are not experiencing any difficulty getting jobs.
- 2. Apparent lack of foresight in NHS workforce planning:
  - Little allowance made nationally for those new graduates who choose to do something different with their degree.
  - No consideration for the number of staff taking part time/job sharing posts even though Trusts are actively promoting 'family friendly' policies.
  - Increasing number of staff coming to retirement age in the next few years.
  - The expectation that most departments will be working extended days resulting in the need for more qualified therapy radiographers. The introduction of CHART will add to the problem.
- 3. The increase in Radiotherapy services anticipated as a result of the Calman/Hine

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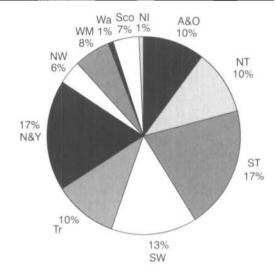


Figure 1. UK-wide vacancy proportions as of 1 April 1999

A&O NT ST SW Tr N&Y	Anglia & Oxford North Thames South Thames South Trent Northern & Yorks	NW WM Wa Sco NI	North West West Midlands Wales Scotland Northern Ireland
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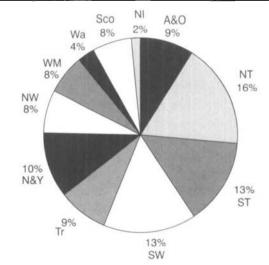


Figure 2. UK-wide establishment proportions (from NW Executive data & telephone survey)

- recommendations and the National Review of Radiotherapy will generate a demand for more therapy radiographers.
- 4. The shortage of radiographers is jeopardising the ability of some departments to participate in research trials.
- 5. The number of applicants for individual posts has dramatically decreased particularly for more senior posts.
- 6. The education establishments in particular commented on the poor awareness and therefore low profile amongst school leavers of therapy radiography as a profession, resulting in a small number being recruited onto courses.
- 7. The number of therapy radiographers moving out of core radiotherapy activities and using their skills in the wider cancer field is increasing e.g. research, information and support etc.
- 8. The number of agency staff on whom departments had relied through the summer months and to cover maternity leave has virtually disappeared. Many departments felt that they are already under-established for the service they are currently expected to deliver. Agency staff had been used in the past to help out on an ad hoc basis.
- 9. Inner London weighting is felt to compromise recruitment in outer London departments.

#### **DISCUSSION**

### Recruitment and Retention

The summer is now the only time in the year when there are newly qualified therapy radiographers available. The survey has identified that there were 167.31 WTE vacancies as of 1 April 1999, which represents 11.3% of the total UK establishment.

Assuming that all 131 students qualify and take up posts in the summer of 1999 this will provide for 78.3% of current need (a deficit of at least 36.31WTE). This shortfall will increase throughout the year, as radiographers are lost through natural wastage and additional posts being created in the light of changes in commissioning for cancer services.

According to the directory of education establishments produced by the Society of Radiographers 1998, there are potentially 187 places for therapy radiography students (excluding numbers from 2 centres where this information

was not printed). However, the numbers of students with appropriate educational standards recruited nation-wide into therapy radiography degree courses in any one year has never exceeded 150. The current attrition rate from therapeutical radiography degree courses is 20–25% leading to a suggestion that all places should be filled in the knowledge that some students will be lost along the way.

In order to fill all the 167.31WTE vacancies at 1.4.99 with students graduating in the summer of 1999, 223 students should have been recruited onto degree courses in 1996. Assuming a 25% attrition rate 167 students would have graduated. This however takes no account of additional vacancies that will occur before the next cohort graduate in the summer of 2000.

The recruitment of the students qualifying in 1999 has begun much earlier than in previous years. Some students have had more than one job offer and are becoming selective in their choice of workplace, therefore the expectation that some departments have that they will be able to fill their vacancies later this year may be unrealistic.

At present, the vast majority of student radiographers are exempt from paying tuition fees. If this should change it will result in even fewer recruits being attracted into the profession.

Outer London departments feel that their recruitment is compromised by the inequality of their inner London colleagues receiving full London weighting allowance. The rationale for the London weighting allowance may now be questioned in view of the fact that many other cities in the United Kingdom have equally high costs of living and transportation to work. It is reasonable to suggest that this whole issue should be revisited.

The loss of the reciprocal agreement held between the UK and, for example, Australia and New Zealand has resulted in a decrease in the number of qualified therapy radiographers available from these countries to fill short-term contracts. Neither does there appear to be a pool of UK trained therapy radiographers available through agencies to fill this gap.

Radiotherapy is no longer a nominal '9-5' service, yet there appears to be no matching expectation from Health Service commissioners that additional staff are required for a longer working day or for working weekends and Bank Holidays.

The National Education and Training commissioning process does not appear to have taken account of the changes in demand despite predictions given by clinical radiotherapy managers in the commentaries associated with workforce planning. This is well illustrated by the impact on the North West region of the opening of the Lancashire and Lakeland Radiotherapy Unit in 1997 and the pending opening of the North Wales Cancer Centre.

If the expansion of services anticipated from the national review of radiotherapy provision becomes a reality, it is difficult to see where the therapy radiographers will come from to fill the posts created. In some departments there are high numbers of therapy radiographers approaching retirement age, which will exacerbate the problem.

The increasing emphasis on clinical accountability and continuing professional development have highlighted the need to ensure a safe environment for the patient. The added complexity of new equipment adds a further continual training burden on departments. The MDA (Medical Devices Agency) safety bulletin, points out that safety is dependent on training and that, for equipment, model specific training is required. The COIN (Clinical Oncology Information Network) guidelines also suggest training in both techniques and equipment new to each individual. This essential training should constitute a risk management strategy for this curative but potentially damaging modality.

Anecdotally, there is no flexibility in current staffing levels to allow for essential continual training and absence (maternity and annual leave) reducing the efficiency and increasing the risks in some departments. This inability to run to full capacity due to insufficient staff throughout the year leads to increasing radiotherapy waiting times.

#### Planning for the Future

Succession planning is becoming increasingly difficult. The number of Superintendent radiographer vacancies and the low number of applicants for the most senior posts indicate that the differential in financial terms may be inappropriate for the differences in the responsibility being taken.

Within the cancer care team, radiographers have a high number of transferable skills and are moving into many peripheral areas of oncology, for example QA, counselling & information roles, cancer accreditation. In some departments they are taking on roles formerly associated with medical staff. These developments are essential to retain an interested and motivated workforce.

In most departments the clinical radiotherapy manager is a therapy radiographer who plays a key role in the strategic development of Radiotherapy Services within oncology departments. When comparisons of salary are made with other key members of this team then the radiographer compares unfavourably. This inhibits the desire to take on added responsibilities associated with career progression into department management. Inevitably this will lead to future loss of experienced and skilled potential radiotherapy managers into areas where financial reward is greater.

### RECOMMENDATIONS

- 1. Workforce planning for therapy radiographers should become UK wide rather than regional.
- 2. Immediately increase the number of commissions for student therapy radiographer places.
- 3. Using clinical radiotherapy managers, carry out a comprehensive and prospective audit of current and future therapy radiography needs. References should include current national clinical oncology reviews and recommendations.
- 4. Raise the profile of therapy radiography to increase recruitment potential into the profession, e.g. through the national press.
- 5. Encourage and give financial assistance to hospitals that may be able to offer new clinical placements. A more flexible and pragmatic approach to accreditation of clinical training sites would be helpful at this time.
- 6. Examine the attrition rates within therapy radiography training with a view to addressing this concern. (A national survey of students who have left courses for reasons other than failure of exams may be helpful.)
- 7. Address the salary structure for therapy radiographers with some urgency to reflect their place in the Cancer Care Team. Included in this should be a consolidation of allowances, e.g. training allowance, London weighting, into base salaries.

- 8. Trace qualified therapy radiographers who are no longer working in the National Health Service to find out why they left and what might induce them to return.
- 9. Provide a nationally co-ordinated approach to 'return to work' courses.
- Further work in skills mix should be carried out e.g. Radiotherapy helpers to carry out nonclinical tasks.
- 11. Re-visit the mechanism for assessing applicants from countries with whom a reciprocal agreement had been available in the past.

## CONCLUSION

The survey results, comments and discussions have shown that there is a national shortage of therapy radiographers. The reasons for the shortage are complex and wide-ranging. Whilst this cannot be resolved overnight, a national approach to workforce planning for this small professional group – who are key to the effective and safe delivery of radiotherapy services – is essential and required urgently.

# Acknowledgements

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