THE COLLEGE OF RADIOGRAPHERS

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The practice and process of therapeutic radiography: A professional perspective

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The practice and process of therapeutic radiography: A professional perspective

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Acknowledgments

The research team and Radiotherapy Advisory Group wish to express their gratitude to all those colleagues who made a contribution to the research and especially to the practioners, students and managers who took part in the focus groups. They also wish to acknowledge the support provided by the College of Radiographers, without which this work could not have been undertaken.

May 1999

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Executive Summary

The report that follows presents the findings and key messages from the second phase of research carried out between 1997 and 1999 in response to concerns about the future direction of the therapeutic radiography profession. Its purpose was to gain greater understanding and a clearer perception of the current roles and responsibilities of therapeutic radiographers in cancer care, in order to explore how the profession might be developed in the future - taking into account the financial, organisational and political context of the healthcare system.

A discussion document entitled Therapeutic Radiography: A Vision for the Future (College of Radiographers 1997) was published by the Vision Group at Radiology 97. This identified the challenges of the health care revolution and the importance of skill mix in cancer services of the future. It was clear from the various policy documents (NHSE 1995, Report by the Expert Advisory Groups on Cancer, 1995) that the future of cancer services is dependent on an interprofessional approach, where practitioners are valued for their flexibility as well as their specialist expertise. The Vision Group affirmed a major role for therapeutic radiographers in the management of patients with cancer, in the form of oncology practitioners, whose specialist expertise and flexibility would enhance the effectiveness of the patient focused, interprofessional team.

The Vision Group also decided that a thorough needs assessment study of the status of therapeutic radiographers should be undertaken and that the results should inform the strategic direction for the profession into the twenty-first century. The first phase of the study comprised a structured questionnaire circulated to all radiographers which aimed to elicit the status of the professionals and gain an indication of their aspirations for the future (College of Radiographers 1997).

The work presented here represents the second phase of that needs assessment; focus group research with practitioners engaged in self identified role development activities, complemented by perspectives from service managers and students. The study population of practitioners was drawn from respondents to the survey who had indicated their willingness to assist with more detailed research.

A research team consisting of three clinicians and three academics came together to design and execute the research. Topics for discussion in the focus groups were devised with the following outcomes in mind:

- to gain common understanding of terminology used by therapeutic radiographers;
- to gain a range of perceptions about the practice and process of therapeutic radiography;
- to help to refine hypotheses about practitioners' perceptions of the levels of autonomy they have and see themselves achieving in the future;
- to solicit ideas to develop good practice.

Following equipment failure and loss of data from the first round of interviews in February 1998, a further six focus groups were constituted in May and comprised 3 groups of previous contributors matched with 3 control groups of first time participants. They were comprised as follows: managers (previous) 6; managers (control) 6; practitioners (previous) 4; practitioners (control) 6; students (inc. 2 previous) 6; students (control) 6.

The data were transcribed and entered into a software package for qualitative data analysis, NUDIST. An inductive-deductive coding method was adopted. Three members of the research team jointly and inductively coded one transcript. Following this, the remainder were coded according to the predetermined scheme. Each was transcribed by at least two of the three researchers and inter-rater coding reliability was assessed. Finally, all coded transcripts were reviewed by the whole research team.

The researchers looked for sententious meaning as well as inter-focus group and intra-focus group thematic evaluation. Four major themes emerged; autonomy, collaboration, attitudes and the role of the radiographer. The latter had 2 discrete sub themes, the continuum of role development and influences on role development. The analysis focuses on each of these five major themes from the perspective of the three groups; managers, practitioners and students. A strong initial impression emerging from the whole data is of paradox and constructive tension and this sententious meaning is drawn out and interpreted in the text.

The major conclusions arising from the data analysis are:

- The present lack of common understanding about the meaning of autonomy is creating a dissonance in the practitioners' thinking about their role in today's health service.
- Collaboration is valued but within the context of strong professional boundaries. However, diverse views exist about the limits of the role of the therapeutic radiographer, with managers and students privileging technical over patient-centred aspects. In contrast, practitioners appear to hold these two aspects of their role in equilibrium;
- There is a willingness to develop new roles but this is not matched universally by an acceptance that the additional skills required are not inherent by virtue of initial qualification and experience but will need to be underpinned by continuing professional development;
- Therapeutic radiography roles are in a ferment of positive, but not linear, development and many opportunities are being effectively cascaded through clinical departments, gradually opening up the profession and ensuring that the professional role is becoming more overt and diverse;
- There is a widespread perception of a low professional profile for therapeutic radiography. The responsibility for addressing this is seen to lie with the profession itself, although the context in which cancer services are developing is thought to disable radiographers' involvement by its notorious lack of reference to their professional contribution.

The final part of the research process was a nationwide consultation exercise with members of the profession. The conclusions were reformulated as discussion points and debated in groups in order to achieve the widest possible agreement and ownership of the findings. The key messages from the consultation are presented below. It is suggested that a strategy for managing professional development in therapeutic radiography be formulated which takes account of these messages and which ensures its place in cancer care teams providing high quality patient focused services.

1. Autonomous practice is 'being responsible for your own decision making but not necessarily making decisions on your own, that is, without consultation and collaboration.'

Key Messages

The discussions about the meaning of autonomy in radiography practice are summarised in Figure 1, page 34. This has as its central feature a spectrum of autonomous practice that is presently most firmly associated with the decision to give the patient their treatment on each occasion, but potentially extends to prescribing radiotherapy as the most appropriate treatment for the patient with cancer.

The autonomous practice spectrum is related to mixed feelings of fear and confidence about the responsibility and accountability that are inevitably linked to new decision making roles. What it means is influenced by personal character.

The current, perceived level of autonomy is underpinned by existing professional knowledge and skills, promoting feelings of confidence. However, appropriate education to support the development of radiographers' increasing scope of autonomous practice is considered to be essential.

Autonomous practice has key overarching contextual features including the use of protocols in professional practice, medico-legal issues and most significantly, the cancer care team.

2. The practitioners' concept of more permeable, less fixed, professional boundaries fosters interprofessional work and is a more appropriate vision for therapeutic radiographers' professional development given the current national framework for cancer.

Key Messages

Collaboration promotes the multi-disciplinary team environment and patient centred care but is affected adversely by varying skill mix, resources and attitudes.

Professional boundaries should be more permeable since fixed boundaries inhibit seamless care. However, there is a need for mutual acknowledgement that core skills exist in each profession and are valuable. The whole profession is responsible for ensuring and maintaining permeability.

Local and national initiatives are required to promote effective interprofessional communication.

Education which both crosses professional boundaries and raises awareness of the contribution of therapeutic radiography should be encouraged.

3. There needs to be a much more explicit relationship between Continuing Professional Development (CPD) and the realisation of individual and professional aspirations to maintain and develop the role of the radiographer in cancer services.

Key Messages

Role development is frequently initiated through individuals' aspirations and motivation and therefore may be stifled easily by a lack of resources.

CPD must be viewed in 2 equally important contexts; to enhance existing knowledge and competence, and to develop new roles. It should, where possible, be formalised and accredited.

Role development is the radiographers' responsibility, a bottom up initiative.

CPD should be mandatory within a national framework.

4. There is a need for these initiatives to be captured by the profession and taken forward in a coherent policy, preventing fragmentation and encouraging sharing and dissemination of sound evidence-based practice.

Key Messages

National and local networks to share initiatives and good practices should be developed. Greater use should be made of the Internet, websites, more seminars and possibly special interest groups.

Accreditation is essential for credible, visible practice. Better use needs to made of local education providers. Consistency and good practice should be monitored and audited.

The role of the Society of Radiographers (through the Radiotherapy Advisory Group) is to promote national professional interests and act as a resource for individual practitioners.

A culture change is needed with the ability to think more radically about the promotion and development of the profession. This change must be both external (relationships with others) and internal (by staff in departments). Departments could consider a Training and Development post.

5. The promotion of radiotherapy and the expertise of therapeutic radiographers has historically been neglected. This is self-evidently a collective responsibility which needs to be realised urgently through local and national initiatives.

Key Messages

The responsibility lies with the profession and should be realised through local and national initiatives. Local initiatives could include taking proactive ownership of the profession and working actively outside current boundaries. A suggested national package to enhance the profession's profile include the appointment of a Publicity Officer, holding more workshops and instituting a National Radiotherapy Day.

Evidence based practice is a key responsibility of all practitioners and vital to credibility.

The present title of radiographer is problematic. The profession is over identified with diagnostic radiography and insufficiently differentiated by the public from nursing.

There is a need for ongoing monitoring and review of opportunities to influence change which promotes quality patient care.

THE CONTEXT

1. Introduction

The report that follows presents the findings and recommendations of the second (qualitative) phase of research carried out between 1997 and 1999 in response to concerns about the future direction of the therapeutic radiography profession. Its purpose was to gain greater understanding and a clearer perception of the current roles and responsibilities of therapeutic radiographers in cancer care, in order to explore how the profession might be developed in the future - taking into account the financial, organisational and political context of the healthcare system.

In 1996, a subgroup (the Vision Group) comprising radiotherapy superintendents and service managers was established from the National Federation of Imaging and Radiotherapy Managers (NatFIRM). Their remit was to consider, amongst other issues, the uncertainties in current health care policy and provision and the resultant effects on the oncology service. In particular they focused on the changes occurring in the field of radiotherapy and clinical oncology, and their impact on the professional practice of therapeutic radiographers.

Inconsistencies in cancer management were being reported across the United Kingdom and changes necessary to improve the quality of cancer care had been identified in the Report of the Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales (Department of Health 1995), known as the Calman Hine Report. These changes included a need for more flexibility in approach to the emerging technologies and an acknowledgement of the need for seamless, patient focused care. It was widely agreed that the technological and radiobiological developments had led to alterations in professional practice, while cultural change had fostered consumerism with a concomitant need for the practitioners to consider more explicitly the legal implications of their work.

The Vision Group published a discussion document entitled Therapeutic Radiography: A Vision for the Future (College of Radiographers 1997) at Radiology 97. This identified the challenges of the health care revolution and the importance of skill mix in cancer services of the future. It was clear from the National Health Service Executive (NHSE) policy on training and education (NHSE 1995) that the future of cancer services is dependent on an interprofessional approach, where the practitioners will be valued for their flexibility as well as their specialist expertise. The Vision Group affirmed a major role for therapeutic radiographers in the management of patients with cancer, in the form of oncology practitioners, whose specialist expertise and flexibility would enhance the effectiveness of the patient focused, interprofessional team.

However, prior to the publication of the above document, the Vision Group decided that a thorough needs assessment study of the status of therapeutic radiographers should be undertaken and that the results should inform the formulation of a strategic direction document for the profession into the twentyfirst century (College of Radiographers 1997).

Phase one of the study comprised a structured questionnaire circulated to all radiographers which aimed to elicit the status of the professionals and gain some indication of their aspirations for the future. The results of the initial survey were published in Synergy in December 1997. Data were collected from all NHS regions with a reported response rate of 50.8 per cent and indicating a breadth of expertise, academic qualification, both pre- and post-registration and range in years of service. The major role identified was that of clinical (general) radiographer (comprising 72.5 per cent), as distinct from clinical specialist such as simulator radiographer (comprising only 5.66 per cent). The data identified 46 per cent of the respondents as being involved in activities considered to be role development. Of these, 36 per cent agreed in principle to being involved in a more detailed study of current professional practice.

There was a range of activities in which respondents to the questionnaire felt competent and several skills which were described as under-utilised at that moment in time. These latter were grouped into six categories:

- patient care - to include chemotherapy and other drug administration, patient review, information and communication;
- quality assurance;
- specific treatment techniques - including the use of multileaf collimation, portal imaging, stereotactic and palliative work;
- pre-treatment techniques;
- complementary therapies;
- management and oncology related skills such as phlebotomy, catheterisation and health education.

The results from the quantitative survey have informed and guided the development of phase two of the research which is the subject of this report, namely focus group interviews with participants being drawn from those respondents who had identified themselves in the descriptive study. A research team was identified to execute the focus group research project, comprising three clinical managers and three academics. It was intended to use the focus groups to develop a deeper understanding of the current experiences of therapeutic radiographers as depicted by the survey and to capture the scope of practice and professional aspirations for the future. In addition the Vision Group hoped that undertaking the project would encourage broadening of professional horizons and foster an interprofessional approach to the care of the cancer patient.

2. Background

Although ionising radiation has been used in the fight against cancer for almost a century, the profession of therapeutic radiography has a short history, only having been formally recognised as a separate qualification in 1951 (Jordan 1995). Since that time technological advances have changed the face of radiotherapy although the main focus of the profession has been constant, the accurate delivery of radiotherapy treatment to patients. Technical and scientific developments, together with legislative changes and a re-examination of the way the cancer service is managed have had, and will continue to have, a considerable impact on professional practice and interprofessional relationships in cancer care.

The Calman Hine Report (1995) recognised the importance of a patient focused service and proposed a new structure for cancer services which would provide a comprehensive, consistent, seamless expert service to patients. The importance of interprofessional care and communication is a theme throughout the report and a number of professional groups are identified as having particular roles. It is a detrimental oversight that when appraising the contributions that the various professions make to cancer services, the profession which is the main interface with patients having radiotherapy treatment, therapeutic radiography, was not considered. However the importance of gaining and maintaining expertise in cancer management is stressed. It is ironic to note that nurses are prominent and that their need for post-registration qualifications in oncology is acknowledged. While the main focus of the role of the therapeutic radiographer has remained the same since 1951, the range of activities undertaken as part of that role has contracted significantly. The introduction of computer planning systems led to an increase in the involvement of medical physics personnel and a concomitant decrease in the involvement of radiographers. Similar changes in mould room technology combined with an increasing complexity of immobilisation devices and shielding blocks has led, over the recent years, to a reduction in the routine involvement of radiographers in mould room work as it became necessary to employ dedicated mould room staff in response to increasing demand.

Recognition of the therapeutic radiographer as an integral member of the interprofessional team depends on perspective and the political context of any discussion about cancer care. Reports such as the Calman Hine (1995) largely ignore the role of the profession, the Royal College of Radiologists vary in their approach (Royal College of Radiologists 1993, 1996), while the practitioners themselves see their role as essential (Price et all997). Price et al (1997) suggest that

the 'pecking order' of the team members; clinical oncologists, medical physicists, radiographers and nurses is changing since the advent of preregistration and post-qualifying degrees. They also suggest that the status of therapeutic radiography will change because changes in educational preparation and post-registration development have encouraged radiographers to reflect on practice, and to take an active role in quality assurance initiatives and research while actively seeking more responsibility and autonomy.

It is incontrovertibly true that the technological developments in equipment have required radiographers to gain new knowledge and expertise in the safe and accurate use of increasingly complex linear accelerators and their accessory systems (Short & Griffiths 1996). Equipment such a multileaf collimation, megavoltage imaging systems and three-dimensional planning has required radiographers to embrace the underpinning information technology and led to the development of specialist radiographers, albeit that this specialisation could be considered as inherent in their professional practice. The acquisition of such skills has been suggested by some to have had a negative influence on professional practice, with radiographers becoming less technical (Price et all997).

Changes in clinical practice such as the introduction of the extended working day and CHART (continuous, hyperfractionated, accelerated radiotherapy) require that the radiographers be flexible in their work practices (James 1997), while quality assurance initiatives such as Quality Assurance in Radiotherapy (Department of Health 1994) correlate directly the outcomes of radiotherapy with technical efficacy. It is suggested that the standards recommended by the Royal College of Radiologists (1996) on target times for commencement of a course of radiotherapy, in conjunction with increasing referrals for radiotherapy as a result of demographic changes, have affected work practices.

The effect of changes in cancer management has led to the establishment of departments of clinical oncology, with groups of specialist nurses included as members of the interprofessional team. Radiographers' increased work pressures, combined with the highly technological environment and its focus on the quality of radiotherapy treatment, have resulted in some aspects of the patients' care being passed to other health care professionals. Patients who have psycho-social problems or require simple dressings are being referred to nursing staff. It could be argued that such a referral is the best use of resources. Price et al (1997) comment on the marked differences seen between departments. Radiographers in some departments undertake a range of activities built on skills learned in preregistration years while in other departments radiographers perceive themselves as only working on treatment units.

In recent years the concept of role development has gained increasing momentum. The College of Radiographers addressed the issue of role development in radiography with a requirement to underpin any role development initiative with appropriate education and training (College of Radiographers 1996) whilst reminding practitioners of accompanying medico-legal responsibilities.

Although it is acknowledged that, in imaging, the concept of radiographers reporting on X-ray images was discussed as long ago as 1971 (Jordan 1995), formal role development in diagnostic and therapeutic radiography has evolved from a nursing initiative. Pickersgill (1988) identified the development in nursing as resulting from a shortage of doctors. The financial benefits of delegation of tasks to nurses was supported in the NHS Management Executive initiative 'Junior Doctors: The New Deal (1991). Seifert (1992) commented that the changes to working practices enabling nurses to take on medical tasks could result in major financial savings. By 1996 a formal suggestion was made that nurses could be trained to take on the work previously carried out by junior doctors (Porrett 1996).

Role development in radiotherapy has occurred mainly as a result of pressure from within the profession and in recognition that medical shortages inhibit the ability of departments of clinical oncology to implement the seamless patient focused care which the Calman Hine Report (1995) demands. The College of Radiographers commissioned a survey of role developments in radiography (Paterson 1995) which revealed a great diversity in the roles currently being undertaken and those which were in development. A similar diversity was also evident in the initial, phase one, survey carried out by the Vision Group (Synergy 1997) where the respondents identified a wide range of skills that they possessed which were presently under-utilised.

Nurses actively promote role development seeing this as a way of gaining access to new and broader opportunities (Masterton 1993). There is a wide literature base for such developments and the concept of specialist practitioner is now widely accepted. The UKCC (1994) defines the specialist nurse practitioner as someone:

, ... able to demonstrate higher levels of clinical decision making. Able to monitor and improve standards of care through supervision of practice and clinical audit. The provision of skilled professional leadership and the development of practice through research, teaching and the support of professional colleagues.'

The definition given above should also apply to radiographers. In radiotherapy it could be argued that radiographers have become too introspective, concentrating too much on the technical aspects of practice. Nurse educational developments have enabled them to take an active role in the management of cancer patients, including involvement in radiotherapy review clinics. Radiographer involvement in radiotherapy review has developed as part of local initiatives (Foulsham 1997). The more active involvement of radiotherapy radiographers in information and support, education and training, and quality assurance as discussed by Fell (1996) and Paterson (1995) is one development examined in the research reported here.

METHODOLOGY

1. Introduction

The motivation for the research reported here arose from the quantitative survey of the profession. This descriptive study of therapeutic radiographers aimed to assess the current status of the profession based on their views and intentions for the future.

A total of 1561 questionnaires was sent to all known practising radiographers in Great Britain, either via the local Society of Radiographers Industrial Relations Representative, or through Heads of Departments in Institutions of Higher Education. A Freepost envelope was included to encourage individuals to return the questionnaires which were coded by hospital and analysed by National Health Service Region. The response to the questionnaires was 793 (50.8 per cent), distributed among all Regions, ranging from a 37 per cent response in South Thames to a 69 per cent response from Wales. In addition to providing a useful demographic profile of the profession and information about radiographers' knowledge of the policy context of cancer services, the survey sought to compile a professional competence inventory and ascertain which competences respondents believed were presently under utilised and which they would like to develop in the future.

In respect of these latter issues, responding radiographers articulated a wide ranging competence base for therapeutic radiography and reported having skills which are underused, predominantly in the areas of overall patient care and pretreatment technical tasks. The research also revealed a diverse range of professional activities which therapeutic radiographers construed as extended or developing roles, including patient review, specialist techniques, health and safety, student education and training, quality assurance and clinical trials.

At the time of the survey respondents had been asked if they would be willing to be interviewed, if necessary, with a view to amplifying and clarifying the quantitative data. The Radiotherapy Vision Implementation Group (RTVIG) reviewed the detailed results in October 1997 and agreed the next stage of the investigation.

An exercise to gather together individuals' descriptions of their developing roles into common areas was undertaken by a sub-group of the RTVIG. Three major areas of role development emerged which were germane to the organisation of cancer services envisaged by the Calman Hine Report (1995); pre-treatment (12 practitioners), management of the radiotherapy process including review and drug prescribing (11 practitioners) and site specific information and support (9 practitioners).

At the same time, a second sub-group evaluated potential methods of gaining greater insight and they proposed focus groups as practical both in terms of time available, wide geographical location of the sample population, and more specifically because the participative style produces data which is enriched through interaction (Kreuger 1994).

2. Research design

Focus groups may be used to generate grounded theories based on the insights of the participants, specifically their interpretation of previously gathered (quantitative) superficial data (Morgan 1993). In this instance they are normally formal and directive, with pre-set questions for discussion within a limited time frame. The information gained can be used to identify the language and key concepts being utilised by participants, to interpret and validate quantitative data, to solicit ideas which amplify and clarify areas of discussion, and to record perceptions, attitudes and feelings about the research question. Typically, focus groups are facilitated and moderated by two people. The interaction is audio or video recorded and the material transcribed and analysed thematically.

The RTVIG appointed six researchers (the research team), three with an academic background and three clinical managers, to implement the focus groups and analyse the data gathered. None had extensive expertise in this kind of research and therefore a training day was arranged, facilitated by an occupational therapist experienced in focus group work. This proved invaluable in defining the parameters for the focus group discussions, increasing knowledge about the strengths, limitations and skills needed to employ the technique successfully.

The purpose of the focus groups was defined as:

To gain greater understandings and a clearer perception of the current roles and responsibilities of the radiographer practitioner in cancer care, in order to explore how therapeutic radiography might be developed in the future - taking into account financial, organisational and political realities of the healthcare system.

Outcome goals were formulated as:

- to gain a common understanding of terminology used by therapeutic radiographers;
- to gain a range of perceptions about the practice and process of therapeutic radiography;
- to help to refine hypotheses about practitioners' perceptions of the levels of autonomy they have and see themselves achieving in the future;
- to solicit ideas to develop good practice.

3. Sample selection and design of data collection tools

The three previously identified groups of practitioners; pre-treatment (12 practitioners), management of the radiotherapy process (11 practitioners) and site specific information and support (9 practitioners) were invited to participate. To gain the broadest possible perspective on role development in therapeutic radiography, it was decided to complement the practitioner groups with a focus group of 12 radiotherapy service managers and a similar one of second year student radiographers. Managers were selected randomly from a complete list supplied by a member of the research team while the students were recruited by writing to the representatives at all relevant educational institutions and asking for a nominee. This made five focus groups in total with an anticipated membership of between six and 12 each.

The research team devised a schedule of topics for discussion within the focus groups. They were related directly to the purpose and outcome goals, modified to take account of current roles. For necessary differences between schedules for managers, practitioners and students, see Appendix 1. Each focus group was scheduled to last for one hour with the first 15 minutes reserved for identifying ground rules and establishing a rapport in the group, leaving 45 minutes for the taped interviews.

The research team also drew up an observation proforma for use by the moderator to record information about the level of contribution made by individuals, their body language and expressed emotion, degree of conflict/ consensus and emergent key points. These latter were fed back to the participants at the end of the 45 minutes to strengthen the validity of the results since each group member had the opportunity to agree or amend the key points in line with their beliefs about what issues were prominent in the discussion.

The focus groups were organised so that it was additionally possible to have a 'fly on the wall' observer present. At the debriefing sessions after the interviews were completed, this person was able to comment further on the process and outcomes, providing a further level of reliability.

4. Implementation

The focus group interviews were held at The College of Radiographers in February 1998. Of the 32 practitioners invited to participate, 25 responded, with 17 acceptances. Due to imbalance in

group composition, it proved impossible to have three practitioner groups and the 'radiotherapy process' and 'site specific information and support' respondents were amalgamated. In the event, 14 practitioners arrived and the resultant focus groups comprised five in 'pretreatment' and nine in the amalgamated one. The seven members of the managers group were, coincidentally, from diverse geographical locations and differently sized clinical departments. The student group comprised nine people from eight different institutions; one young woman feeling the need to bring a friend.

Thirty people in total contributed to four focus groups at this time. The research team fulfilled the roles of facilitator, moderator and observer, with each member occupying each role at least once. The event passed off without problem and the tapes were sent for transcribing but were found to be largely inaudible. The sound recording company employed to audio tape the interviews failed to ensure that their equipment was operating effectively, meaning that all the data were lost.

Advice was sought from other researchers about the effect on reliability and validity of repeating the focus groups considering that the subjects would have previously rehearsed the interview questions. It was suggested firstly, that any effect would probably be insignificant and that rehearsal might even be beneficial. Also it was pointed out that it is not uncommon for focus groups to meet more than once. Secondly, any effect could be evaluated if a control group was established for each of the groups. With respect to the practitioners, this could consist of non-responders to the initial focus group invitation. For the managers and students' groups a control group could be formed by inviting people not previously selected.

In May 1998, following the previous format, 6 focus groups were constituted and a second round of interviews went ahead. There was insufficient response to a second request to participate for 2 practitioner groups each with controls and therefore they were combined into one group with a control group. Only 2 students from the initial group were able to attend but the response from students was sufficient to operate 2 focus groups. The final composition is given below:

Managers (previous)	6
Managers (control)	6
Practitioners (previous)	4
Practitioners (control)	6
Students (inc. 2 previous)	6
Students (control)	6
TOTAL	34

5. Ethical issues

At each stage in the research design the ethical issues raised by the investigative work were paramount. Practitioners were identified from the anonymous, coded data of the quantitative study by the author. Together with the randomly selected managers and the student group, they were invited to take part in one of the focus groups. Details about purpose and composition of the groups were given in writing and confidentiality and anonymity of comments made in any publication of the results was stressed. Acceptance of the invitation to participate was construed as giving consent.

Ground rules for the operation of the focus groups were drawn up by the researchers and discussed and agreed by each focus group. They covered the procedure and the importance of confidentiality and respect for individuals' contributions. They were pinned up prominently during the focus group.

The results and data analysis are presented anonymised with participants identified only as manager, practitioner or student. Permission for quotes to be used was gained during the opening remarks by facilitators.

6. Method of data analysis

The data were transcribed and entered into a software package for qualitative data analysis, NUDIST. An inductive-deductive coding method was adopted. Three members of the research team jointly and inductively coded one transcript. Following this, the remainder were coded according to the predetermined scheme. Each was transcribed by at least two of the three researchers and inter rater coding reliability was assessed. Finally all coded transcripts were reviewed by the whole research team.

The researchers looked for sententious meaning as well as inter-focus group and intra-focus group thematic evaluation.

7. Reliability and validity

The research team pursued a robust, transparent methodology to ensure reliability and internal validity. However, this project concerns the practice and process of the profession of therapeutic radiography and the outcomes are intended to inform professional development. External validity is therefore of the utmost importance since the profession as a whole must take ownership of the conclusions and decide whether and how to take them forward.

Lincoln and Guba (1985) describe a conceptual framework for establishing rigour in qualitative, naturalistic enquiry using the concepts of trustworthiness, honesty, II credibility, transferability, dependability and confirmability. Trustworthiness, honesty and dependability of the research can be assured through robust design with a transparent decision trail in the written report. Credibility, transferability (or face validity) and confirmability must be conferred by the expert stakeholders, the profession itself. It was therefore decided to undertake a professional consultation about the research findings by extending an invitation to each radiotherapy department in the British Isles to send a maximum of two staff representatives to a workshop where the previously circulated conclusions would be presented for debate.

8. Summary

The final sample on which this focus group research is based, although significantly different from the respondents to the first invitation in respect of the practitioner and student groups, nevertheless constitutes a larger group than participated initially (34 vice 30) and represents the intended constituency equally well. A robust design was pursued and validity and ethical probity attended to. The research team therefore have confidence in the results and analysis interpreted below as representative of the practice and process of therapeutic radiography at the present time.

RESULTS AND DATA ANALYSIS

1. Introduction

Four major themes emerged with one, namely the role of the radiographer, having eight sub-themes. Further scrutiny of the resultant data sets led to the decision to restructure the radiographer's role coding schema into two discrete themes. The analysis below focuses on each of these five major themes from the perspective of the three groups; managers, practitioners and students. The relative importance of each theme to the specific groups is appraised.

Arising from the previous failure to record the first round of focus group interviews, it was decided to introduce the element of control into the reconvened ones in order to assess any effect of rehearsal when the interviews were repeated. Scrutiny of the raw interview data by all six members of the research team individually revealed no obvious differences in response between first and second time interviewees which could be inferred explicitly to a rehearsal effect.

A strong initial impression emerging from the whole data is of paradox and constructive tension and this sententious meaning is drawn out and interpreted in the text through the thematic framework and illustrated, where appropriate, with selected raw data from the three respondent groups.

2. Autonomy (*5.5 per cent of text units*)*

The notion of autonomy is framed by powerful professional boundaries and individual aspirations. It was overwhelmingly an issue for the practitioners in comparison to the other groups. A number of practitioners dearly felt that within the treatment room and related aspects of patient care and administration they can and do make decisions, as this practitioner told us:

'if you don't think a patient is well enough..... then we can say we are not treating them because ultimately... it is your responsibility. 'P

Respondents saw their decision making capabilities developing in relation to planning and treatment for palliative disease. While presently the practitioner is responsible for planning but treats only after medical approval of the simulation radiograph, we heard views that this would evolve to medical approval after the first fraction.

Practitioners are also moving forward practice by accepting that working collaboratively and to protocols, permits more credible and explicit decision making through proactive leadership. This is especially in relation to accepted aspects of care that are embedded in radiography practice where the view was expressed that *'it isn't my decision really, but it's up to me to move things all the time.'P* Practitioners foresaw that new technology and the acquisition of site specific expertise will lead to more autonomy and greater awareness of the potential for professional development.

P = Practioner *M* = Manager *S* = Student

* These percentages are taken from the software text unit count which also counted, e.g. facilitator's introduction and questions, extraneous material and summaries. Thus they relate to only approximately 50 per cent of the transcribed data.

In contrast, managers and students have a more conservative view of the limits of radiographers' autonomy. For managers the concept is more passive and is seen as assuming greater responsibility within the current professional boundaries. Aspiration for role development is viewed as arising from individual ability and motivation. Thus we were told that:

'the sky's the limit, certainly as individuals (agreement from others in the group).... But if you are looking at the profession moving forward I think it is totally different.' P

The mindset demonstrated is that of separate professions with dearly demarcated roles and responsibilities; and role development is construed as *'training for another profession'. M* Unsurprisingly the students had a narrow view of autonomous practice, relating this to the technical aspects of patient care. However, it is heartening that they linked decision making with the practice of giving accurate and reproducible treatment and saw this as a central role in radiography practice.

Overall this analysis reveals a lack of a common understanding about the meaning of autonomy as related to practitioners in today's health service. With respect to this issue, semantics are important if intra and interprofessional communication on this matter is to be robust and useful. As one practitioner said:

'I think that we have autonomy as such but within boundaries, and I think that's true of all professions in the NHS... there is always somebody above you.' P

This confirms the need to understand autonomy as 'being responsible for your own decision making but not necessarily making decisions on your own, that is, without consultation and collaboration.'

3. Collaboration (*6.6 per cent of text units*)*

Similar significance was attached to strong professional boundaries when collaboration itself was discussed. The practitioners provided evidence of a breadth of multi-professional collaboration and affirmation that radiographers work well in this context. Extending this to interprofessional work was viewed as challenging but worthwhile. The recurrent theme of paradox is reflected in the view that radiographers gave work away once and are currently seeking retrieval or maintenance of certain aspects of their role.

That professional socialisation is being achieved successfully pre-registration is evident from remarks by students such as: *'I think everyone has their own territory really. 'S* The importance of co-operation, and the challenges this poses, in the improvement of patient services was acknowledged by the students but this hardly extended to inter professional collaboration.

Managers believe that interaction between professions is increasing and we heard that:

'In the multi-disciplinary team, if you've got a radiographer who is treating the patient and supporting them through that process, you can feed back to the breast care nurse... or to the dietician... or to the physiotherapist...' M

Problems about effective collaboration are perceived due to the low professional profile of therapeutic radiography. The responsibility for addressing this is seen to lie with the profession itself although the context in which cancer services are developing is thought to disable radiographers' involvement by its notorious lack of reference to their professional contribution (Calman Hine 1995). There was a belief that the best interests of patients will be served if professional collaboration is a more genuine partnership of equals and that this could be served by developing stronger links with clinical oncologists.

Concern was expressed about the professional aspirations of nurses in particular, and an element

of professional envy was detected about their status, for example:

'the introduction of clinical nurse specialists who are comfortable with the idea that they are practitioners in their own right and they do seem to equate radiographers with their role and I am beginning to find more and more they refer patients to me.' P

The powerful position of the nursing profession and its potential threat to radiography was exemplified by the following comment about a head and neck specialist post where it was considered that:

'these nurses don't know the first thing about radiotherapy. (But) they know even if our radiographers go forward for the job when it is advertised, they wouldn't even get an interview.'M

This was further elaborated by an examination of negative external influences to the maintenance of radiographers' professional role and their future development. The high profile of dinical nurse specialists is positively related to the long and widely established post-registration framework for nurse education, something lacking in radiography. As a manager pointed out, access to a similar framework would give radiographers *'an equivalent qualification'.M* These influences included lack of funding for post-registration and replacement costs. Anecdotal evidence suggests that this is being addressed by Consortia but it remains an issue of concern, since *'they think nurses, don't they. 'P*

Overall, this analysis supports the view that, while individuals are achieving much, there is a need for strong professional leadership in the management of appropriate role development for effective, collaborative, patient services.

4. Attitudes (3.6 per cent of text units)*

Any attempt within the research process to capture attitudes is inherently difficult. From the data collected in this study we report some positive and negative attitudes but this is of necessity limited. The following comments attempt to capture something of how our respondents felt about the new roles and the changes that are happening within therapeutic radiography practice.

Again, a tension is identifiable between those not participating in role development who see these new roles as extra-professional and the practitioners involved who told us that *'you're just doing a different part of the job.'P* From the manager's perspective there appears to be a significant shift in attitude away from what radiographers perceive they could do, and would do if they were rewarded, to a more proactive approach to professional and personal development. Willingness to take risks in order to embed new roles was evidenced. However, this was accompanied by feelings of wariness and a perceived unwillingness to change amongst more experienced staff members. This appears to arise in these staff, in particular, from a lack of confidence, since:

'they are very, very wary of change, particularly the older ones;'M

and

'When we were young we just did as we were told... radiographers these days are very much looking out for themselves, how they can go forward.'M

In contrast, we learned from a manager that participating in role development was *'about taking risk... to actually risk putting somebody into something that's not generally considered to be their duty' .M* In many instances, managers are leading developments and finding that persuading staff to engage with them in this process is not entirely problem free. It would seem that sometimes:

'... radiographers are a bit reluctant, they want to do it , but they don't want to do it as part of a formal qualification... but it will involve some input on their part and they don't want to do it ... it's

got to be a two-way process.'[M]

This reluctance is interpreted as exemplifying paradox; radiographers' unwillingness to admit their need for additional formal development since it makes that need explicit to self and others. This might perhaps be related to a lack of critical reflectivity in our professional education and practice.

Students' openness to professional development was apparent and they demonstrated a positive awareness of the need to have a change in attitude and were willing to ask for help in achieving the change in role.

5. The radiographer's role (37 per cent of text units)*

Further immersion in the data sets suggested that the eight sub-categories, while giving the opportunity to explore the separate issues in some detail, coalesced readily and could be reconstructed in this analysis into two themes pertinent to the purpose of this study. The first theme is the continuum of role development, encompassing the breadth of new roles, initiators and potential for future development, while the second concerns the context in which development is occurring, influences which are both internal and external to the profession.

5.1 The continuum of role development

Many roles were described as new during the interviews as the following list demonstrates; on treatment review, research radiographer, breast specialist, marking up breast techniques, assistant business manager, information and support radiographer, stereotactic radiotherapy, manual handling and risk assessment, QA and audit, paediatric specialist, enhanced roles in treatment planning and verification, protocol writing, other site specific specialists, membership of policy making groups. The data make it dear though that the concept of new role is itself contested with some departments regarding some roles as current practice while others regarded them as developments. These differences in local practices were highlighted particularly by the students in their focus groups.

This paradox can be illuminated further through analysis of the discussions which took place about these new roles which practitioners are assuming. There is awareness of the explicit responsibilities which the work entails in all the focus groups, although this is tempered by a strong sense from both managers groups that role development is in fact re-expansion to the more holistic practice of a generation ago, albeit more formalised than before.

A feeling of déja vu was most apparent, illustrated by:

'although the role is more expansive now, we are going back to some of the old practices.'[M]

A similar constructive tension surrounds the development of specialist roles within oncology practice. Specialisation is valued, especially when it is undertaken by radiographers, but the dangers of fragmentation are also well understood as in the view of one practitioner that *'all the things we've been doing ... have suddenly become a specialised job and other people have come in and taken them. 'P* The possibility that individual specialisation is an important stage in the process of developing holistic practice was acknowledged:

'the role was developed in the first place as a way of developing that speciality and now part of the role is to bring it back within the normal remit...'[P]

Specialisation was perceived to be occurring in two discrete areas; technical and patient-centred skills, with a tendency to see these as mutually exclusive. Care needs to be taken that technical

specialisation does not work against the profession by reducing the role to a purely technical one. The rapid advance of technology and lack of motivation of some radiographers were highlighted by the research subjects as potentially damaging to development and a cause for some regret as in, *'it's sad that they're losing contact with the patients.'P* However, there is a genuine attachment to the core technical functions of therapeutic radiography which will not be willingly relinquished as evidenced by the students who were focused on the significance of core technical skills, seeing specialisation as a postregistration development while '*we've still got that basic knowledge there if we need to use it.*'S

A picture emerges of the need to see clinical oncology as the radiographers' general area of work but there is some hesitancy about the career opportunities of those who specialise too much, e.g. become site specific practitioners. A student's contribution to this debate highlighted how the present machine-orientated staffing arrangements could be altered to provide job satisfaction, she said:

'At the moment ... radiographers are jack of all trades, they do three months maybe on one machine, then move onto another department, maybe they can become more specialist and spend longer periods of time before doing that job for good, say for research radiography and doing that and maybe going back and forth onto the machines when you're needed but staying at that job for good.'S

Development into information and support roles was valued by all groups, although more by practitioners than managers or students. As one manager said, *'the sort of role development that, managers see ... as most appropriate is not necessarily.. what the radiographers want. A lot of them have difficulty thinking beyond counselling.*' M

However, the data suggest that the issue is more one of relative emphasis than either/or and both practitioners and students saw the potential of a named radiographer system in promoting seamless patient care.

New roles are not only about the development of new skills; they subsume an approach to practice which is also new, exemplified by a kind of professional pride which manifests itself in questions like *'How far can we take this role?'M,* and an acknowledgement of the importance of evidence based practice, disseminated through protocols. This approach is a welcome sign of blossoming professional confidence although, not unexpectedly, there was also a reluctance to let go born out of uncertainty about the future of the profession as the national service framework for cancer is implemented.

Focus group members were asked about the initiation of role development to try to gain an impression about how it is being directed and who are the key players. The contested definitions of new roles and diversity of local practices points up the ad hoc, informal nature of the majority of initiatives to date. Particular practitioners and managers were recognised as having seized opportunities as they have presented and a picture is drawn of both top down and bottom up developments within a permitting environment. Examples were given of imposed developments and also of practitioners taking the initiative with little managerial support. Individual personality attributes were seen as counting equally with social and environmental factors. For example:

'you have to take it upon yourself'S is juxtaposed with *'the driving force ... has been the consultants haven't got time to do it any more.'P*

Overall the research demonstrated that therapeutic radiography roles are in a ferment of positive, but not linear, development. There are many opportunities and these are being cascaded through dinical departments, gradually opening up the profession, although, as indicated earlier, this was not welcomed universally and is certainly generating a degree of anxiety and some retreat and

resistance.

How the profession views its future reflects this continuum of role development, especially the tension between holding on to and developing our core technical skills and reaching out into the wider cancer arena. Thus:

'we should look at the development that involves the core elements of our profession... if we allow that technology to lead us we will be on a much firmer footing.'M,

and

'... if we are not very careful, we will be sitting beside our Linear Accelerators, pressing buttons and not doing a lot else.'P

Although students appeared technically oriented, they were also very aware of the potential for development and optimistic about future opportunities. They recognised that their education is ahead of the role they expect to occupy on qualification and told us things like, *'you also learn lots about cancer... you don't get to use any of that.* 'S They anticipated being able to move into other areas of cancer practice throughout their careers.

The imaginative idealism of the students as practitioners in cancer care is interpreted as giving way to pragmatic, but generally optimistic views of practitioners as *'the lynchpin'* of the radiotherapy process: *'At the end of the day, there may be all this role development, but most (radiographers) will be having to treat people because that's what we do' P,* while managers were more cautious still about the future of the profession.

5.2 Influences on role development

All the groups interviewed had views on what had influenced the present extent of role development. Such influences are both intra- and extra-professional and indude forces for and against the pursuance of new roles. Respondents also commented on the needs of radiography practitioners if the current status of such developments is to progress and become more prevalent. These influences are detailed below. Initially, intra-professional aspects are considered, followed by commentary on influences from peer professionals and other aspects of the external environment.

The intra-professional perspective

The expertise of radiographers across the complete range of radiotherapy practice is seen to give them a depth and uniqueness of knowledge about the patient and their *'cancer journey'*, since as one manager said *'radiographers see everybody's patients.'M* This is complemented by their efficiency and effectiveness and a preparedness to initiate practice. The following short quotes are supportive of these professional characteristics and indicate not only recognised but also unrecognised abilities. Thus we heard that radiographers are:

'very capable; the most important people in the department apart from the patients; flexible; good at organising and co-ordinating radiotherapy services; good at communication; unappreciated; and have untapped potential.'[M]

Respondents also said that radiographers were willing to refer patients and seek advice, strengths which made them good intra-professional team workers.

It would seem that much role development in radiography has taken place when the specialist skills and knowledge outlined above are combined with growing professional confidence and, *'because of the frustration of having to wait for medical staff'M* In this respect the influence has *'come from the radiographers themselves'P* and has involved a combination of individuality and opportunity, not always in a planned sense as this description, by a practitioner, of how the

development occurred shows: *'I sort of fell into my role.'*

Elsewhere, forward looking managerial leadership and support has dearly played an important part. We heard of managers that:

'have lots of ideas and are willing to listen to the ideas of ... radiographers, and put those forward, ... that will make a difference and so that's perhaps where it's got to maybe start.'

Graduate status has also been a motivating factor, since *'graduate radiographers are much more likely... to want to extend their role.'M* In addition, the data indicated the importance of publishing role and practice developments to assist where radiographers may encounter resistance. One practitioner said that:

'if we publish what we're doing on any level, then other radiographers can read it and then if they are getting people saying, you know, we can't do this, can't do that, but it's happening in this department, sort of thing, so you can use it there.'P

It would appear that support for colleagues in a number of ways is important as new roles develop. However this is not only a task for individuals but as one student commented:

'you're going to need the support of other radiographers that maybe don't feel as strongly as you do ... and I think getting the backing of other members of your hospital, like the oncologists, and the nurses.'S

The preceding positive outline of the how and why of therapeutic radiography role development is however an incomplete account of the internal influences on this important change in our profession. We also heard comments about complacency, fear and a lack of interest in any type of evolving role, although the latter was more a reflection on the past than the present. The managers agreed that there were *'technophobes amongst radiographers'M* and a practitioner summarised the impact of the past by saying:

'there's the need for the roles to be developed, but 20 years ago, (radiographers) just wanted to press buttons on machines, weren't interested in patient care, weren't interested in planning, ... we should be expanding to other jobs, but unfortunately it's been taken. 'P

Why the abilities of radiographers have a low profile externally was seen as an issue for resolution at national level. One practitioner talked of how *'the Society, the College, our profession doesn't, or hasn't in the past promoted radiotherapy and the abilities of the therapy radiographers. 'P* and another that:

'the job of the Society on a national level is just to take an overview, try and find out what is going on and what the roles are, what roles are being lost within departments.'P

This failure of recognition is also about the distinction between the two professional disciplines and happens at local levels as indicated by a practitioner who spoke of the need to: *'recognise the difference between two Society of Radiographer members, one diagnostic and one therapy. 'P*

Recognition of the role of the radiographer is an important one, extending across the intra- and extra-professional perspectives by involving the radiographers' own professional body, their peers and the public. It would seem that unhelpful perceptions about the radiographer's role can hinder development and impede effective patient care, and this is further discussed below.

The extra-professional perspective

The external influences on radiography role development have been, in a similar way to those in the previous section, both positive and negative. New regulatory frameworks and technology

have presented opportunities that have been taken up by radiographers who '*wanted to respond to the technology before other groups of staff moved in.*'[M] Skill mix is another development that has presented radiographers with opportunities to capitalise on their strengths with the result that, for example, '*senior radiographers have fulfilled a lot of the roles that would traditionally be held by senior registrars.*'[M]

There was a lot of comment on the influence of the oncologist, both at individual and national levels, on radiography role development. These induded: '*medical staff expect so much more from us.*'[M] The duality of the power of the clinicians and their dependence on sound radiographic practice was also noted as we were told by a manager: '*Our oncologist friends, The Royal College of Radiology, ... they rely on us. They are the only people really that have a lot of clout.*'[M] Nurses, in specialist roles, also appear willing to accept the need for referral to the (radiographer) expert in radiotherapy, once made aware of her/his expertise.

A major impedance to role development in radiography is related to staffing levels and as one manager told us '*the perception that there is a shortage of radiographers.*'[M] In some places the shortage is real but whether real or perceived the view remains that radiographers are needed for the more traditional aspects of practice and releasing staff to learn about, and practice in, new roles is difficult. Hence, we heard from managers that:

'the numbers are actually needed for the machines' and '*it is really quite difficult, it*'*s fine if they are chipping away within the department, but quite difficult as a manager when we are trying to send people on courses, be they internal, external, wherever, because of staffing levels and because of finance.*'[M]

Recognition of the roles that radiographers have and could extend into continues to be an issue. In each group respondents agreed that '*people don*'*t think about therapy radiographers*' and '*they don*'*t see that we do a whole range of other things*'; and the people are both our fellow professionals and the public. Students are aware of this issue and suggested that '*we need to get away from being called radiographers*' and '*that we are (not) empowered enough.*'[S]

This section has outlined many of the constraints that make role development difficult for radiographers. The members of the focus groups responded to their situation by articulating the need for some general supportive measures to assist those who participate, or have the potential to participate, in the changes to the traditional professional role. These included dear national leadership training, knowledge, mentorship, experience and the support of the hospital and guidelines: all within the context of adequate staffing and equipment.

CONCLUSIONS

The preceding analysis has shown explicitly the paradox and constructive tension which surrounds professional development in therapeutic radiography. It has presented varied data to elaborate the range of beliefs and concerns which members are expressing about role development and has shown difference in emphasis, though not in kind, among the groups interviewed.

The following conclusions and associated discussion points were written for the professional audience to debate at the Professional Consultation described below, in order to achieve the widest possible agreement and ownership of the findings by the profession. Following this, it is suggested that a strategy for managing professional development in therapeutic radiography be formulated and presented to a wider audience.

1. The present lack of common understanding about the meaning of autonomy is creating a dissonance in the practitioners thinking about their role in today's health service.

The following is offered for discussion:

Autonomous practice is 'being responsible for your own decision making but not necessarily making decisions on your own, that is, without consultation and collaboration.'

2. Collaboration is valued but within the context of strong professional boundaries. However, diverse views exist about the limits of the role of the therapeutic radiographer, with managers and students privileging technical over patient centred aspects. In contrast practitioners, perhaps not unsurprisingly, appear to hold these two aspects of their role in equilibrium.

The following is offered for discussion:

The practitioners' concept of more permeable, less fixed, professional boundaries fosters interprofessional work and is a more appropriate vision for therapeutic radiographers' professional development given the current national framework for cancer.

3. There is a willingness to develop new roles but this is not matched universally by an acceptance that the additional skills required are not inherent by virtue of initial qualification and experience but will need to be underpinned by continuing professional development.

The following is offered for discussion:

There needs to be a much more explicit relationship between CPO and the realisation of individual and professional aspirations to maintain and develop the role of the radiographer in cancer services.

4. Therapeutic radiography roles are in a ferment of positive, but not linear, development and many opportunities are being effectively cascaded through clinical departments, gradually opening up the profession and ensuring that the professional role is becoming more overt and diverse.

The following is offered for discussion:

There is a need for these initiatives to be captured by the profession and taken forward in a coherent policy, preventing fragmentation and encouraging sharing and dissemination of sound evidence-based practice.

5. There is a widespread perception of a low professional profile for therapeutic radiography. The responsibility for addressing this is seen to lie with the profession itself although the context in which cancer services are developing is thought to disable radiographers' involvement by its notorious lack of reference to their professional contribution (Calman, Hine 1995).

The following is offered for discussion:

The promotion of radiotherapy and the expertise of therapeutic radiographers has historically been neglected. This is self-evidently a collective responsibility which needs to be realised urgently through local and national initiatives.

THE PROFESSIONAL CONSULTATION

The consensus consultation exercise was held in March 1999 at the headquarters of the Society and College of Radiographers. Eighty radiographers attended, with nationwide representation. The day began with a plenary session by the research team to outline the research project rationale, method and findings. Participants were divided into five groups for workshops and 20 minutes were allocated for each discussion statement

Discussions were led by the 6 members of the research team supplemented with four others. These 10 people comprised five teams and each team was responsible for facilitating and summarising one discussion statement, moving from group to group. Finally, four key messages were extracted for each statement and presented to the plenary group for agreement.

Each discussion statement with its key messages is presented below:

1. Autonomous practice is 'being responsible for your own decision making but not necessarily making decisions on your own, that is, without consultation and collaboration.'

The discussions about the meaning of autonomy in radiography practice are summarised in Figure 1. This has as its central feature a spectrum of autonomous practice that is presently most firmly associated with the decision to give the patient their treatment on each occasion, but potentially extends to prescribing radiotherapy as the most appropriate treatment for the patient with cancer.

The autonomous practice spectrum is related to mixed feelings of fear and confidence about the responsibility and accountability that are inevitably linked to new decision making roles. What it means is influenced by personal character.

The current, perceived level of autonomy is underpinned by existing professional knowledge and skills, promoting feelings of confidence. However, appropriate education to support the development of radiographers' increasing scope of autonomous practice is considered to be essential.

Autonomous practice has key overarching contextual features induding the use of protocols in professional practice, medico-legal issues and most significantly, the cancer care team.

2. The practitioners' concept of more permeable, less fixed, professional boundaries fosters interprofessional work and is a more appropriate vision for therapeutic radiographers' professional development given the current national framework for cancer.

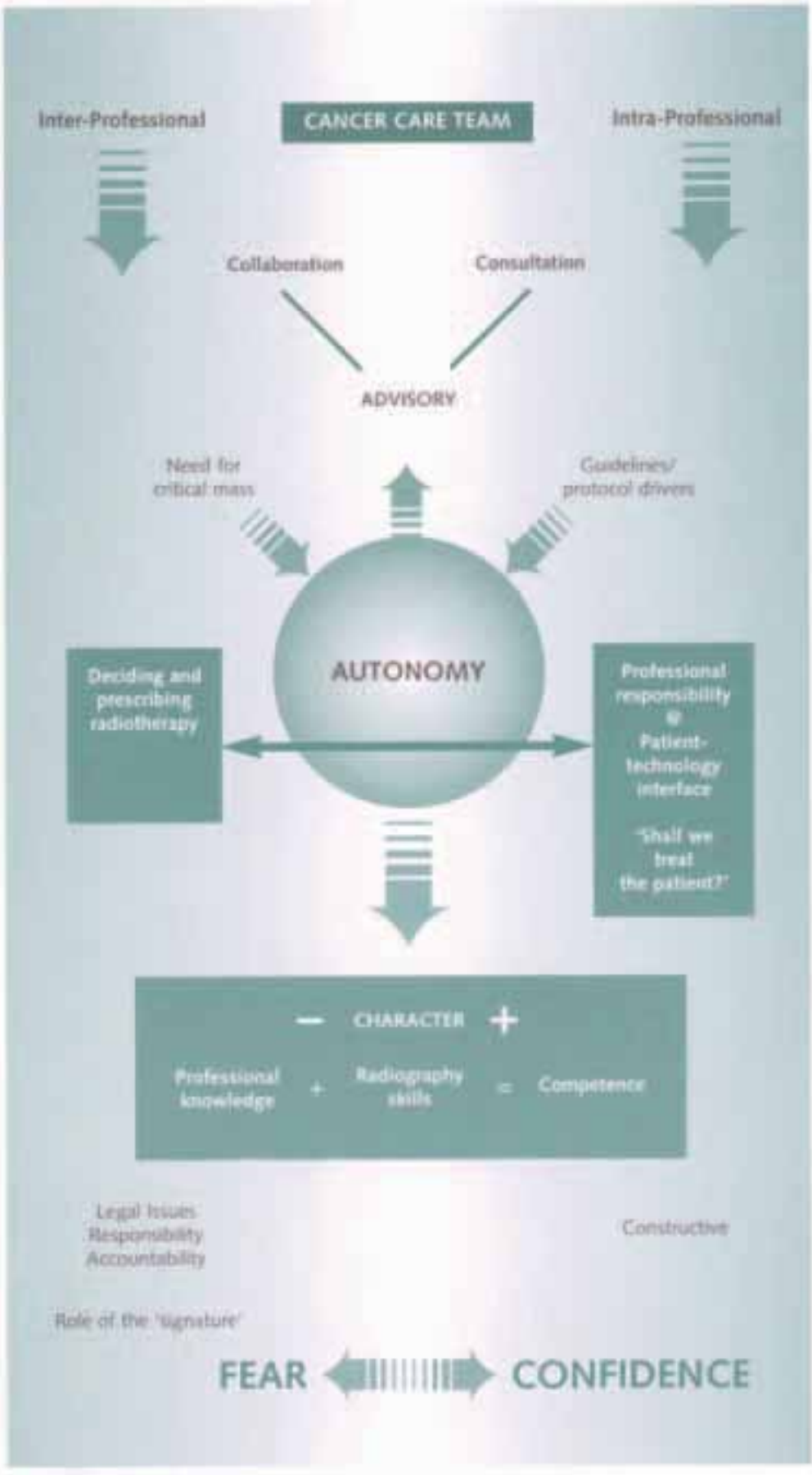
Collaboration promotes the multi-disciplinary team environment and patient centred care but is affected adversely by varying skill mix, resources and attitudes.

Professional boundaries should be more permeable since fixed boundaries inhibit seamless care. However, there is a need for mutual acknowledgement that core skills exist in each profession and are valuable. The whole profession is responsible for ensuring/maintaining permeability.

Local and national initiatives are required to promote effective interprofessional communication. Education which both crosses professional boundaries and raises awareness of the contribution of therapeutic radiography should be encouraged.

3. There needs to be a much more explicit relationship between CPO and the realisation of individual and professional aspirations to maintain and develop the role of the radiographer in cancer services.

Figure 1



Role development is frequently initiated through individuals' aspirations and motivation and therefore may be stifled easily by a lack of resources. CPD must be viewed in two equally important contexts; to enhance existing knowledge and competence, and to develop new roles. It should where possible be formalised and accredited.

Role development is the radiographers' responsibility, a bottom up initiative. CPD should be mandatory within a national framework.

4. There is a need for these initiatives to be captured by the profession and taken forward in a coherent policy, preventing fragmentation and encouraging sharing and dissemination of sound evidence-based practice.

National and local networks to share initiatives and good practices should be developed. Greater use should be made of the Internet, websites, more seminars and possibly special interest groups.

Accreditation is essential for credible, visible practice. Better use needs to made of local education providers. Consistency and good practice should be monitored and audited.

The role of the Society of Radiographers (through the Radiotherapy Advisory Group) is to promote national professional interests and act as a resource for individual practitioners.

A culture change is needed with the ability to think more radically about the promotion and development of the profession. This change must be both external (relationships with others) and internal (by staff in departments). Departments could consider a Training and Development post.

5. The promotion of radiotherapy and the expertise of therapeutic radiographers has historically been neglected. This is self-evidently a collective responsibility which needs to be realised urgently through local and national initiatives.

The responsibility lies with the profession and should be realised through local and national initiatives. Local initiatives could indude taking proactive ownership of the profession and working actively outside current boundaries. Suggested national package to enhance the profession's profile indude the appointment of a Publicity Officer, holding more workshops and instituting a National Radiotherapy Day.

Evidence based practice is a key responsibility of all practitioners and vital to credibility.

The present title of radiographer is problematic. The profession is over identified with diagnostic radiography and insufficiently differentiated by the public from nursing.

There is a need for ongoing monitoring and review of opportunities to influence change which promotes quality patient care.

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APPENDIX 1 - FOCUS GROUP QUESTIONS

RADIOTHERAPY VISION IMPLEMENTATION GROUP
FOCUS GROUP QUESTIONS - PRACTITIONERS

Introduction

You are here because you identified yourselves as being involved with the development of the radiographer's role in ...

Question 1

You are developing a professional role. In your perception:

- How is it different from your previous role?
- How have you got there?
- How much was down to you, your own initiative, self motivation?
- How far do you feel the role was imposed/forced on you?

Key words: Differences, Initiatives, Choice, Responsibility

Question 2

How comfortable do you feel with your developing role?

- How easy was it to develop the role?
- What frustrations do you/have you experienced?
- What level of decision making do you have?
- Are there any frustrations/conflicts associated with multidisciplinary working and professional boundaries?

Key words: Barriers, Professional rivalry, Autonomy, Decision making, Teamworking

Question 3

What additional responsibilities would you like to assume in future?

- Currently?
- With additional training/support?
- Where do you see the profession going in the next ten years?
- Your role in the delivery of cancer services?

Key words: Future development, Cancer services, Skill mix, Good practice

RADIOTHERAPY VISION IMPLEMENTATION GROUP
FOCUS GROUP QUESTIONS - MANAGERS

Introduction

Identified to participate by random selection from those volunteering in response to a letter sent out to all radiotherapy managers.

Question 1

In your view, how has the role of the radiographer changed?
What were and are the influences on that change?

Question 2

How comfortable do you feel with role development? How easy is it for radiographers to develop their roles?
(supplementary - what are the barriers and boundaries?)

Question 3

Where are we going to be in the cancer team of the future?
(supplementary - views on multi-disciplinary working)

RADIOTHERAPY VISION IMPLEMENTATION GROUP
FOCUS GROUP QUESTIONS - STUDENTS

Introduction

Identified to participate by the student member of the College Vision Group, a random selection of willing volunteers.

Question 1

When you get a job, what do you expect your role to be?

Question 2

What sort of decisions will you be making?

Question 3

After 3-4 years:

- How will your role develop?
- What will you be able to do at that time?
- What will your role in the cancer care team be?
- How easy will it be for your role to develop in the way you want it to go?

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