

Systematic review – role expansion in radiation therapy: from an international perspective to an Australian context

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Abstract This systematic review aims to explore the current state of role expansion in radiation therapy internationally and gain an informed understanding of the possibilities of such practices in an Australian context. A comprehensive search from 1990 to 2008 was undertaken to extract publications from electronic databases, individual journals and professional bodies. A thorough title and abstract audit was conducted. Fifteen articles were selected for critical analysis after content examination. The results indicated that expanded roles for radiation therapists (RTs) have been implemented internationally, but few are reported in the Australian environment. The two most prominent roles identified were the patient treatment reviewer and the image reviewer. Additionally, roles such as the breast planning RT, research RT and information and support RT have also been described. The data offered a substantial amount of evidence that developed countries are progressing rapidly towards role expansion. Expanded practice has conferred greater accountability; autonomy and responsibility on RTs. Positive outcomes such as improved patient care and increased job satisfaction for RTs have been observed despite barriers such as medical dominance and legal issues. It therefore appears that role expansion in RT is viable in Australia, but further research and evaluation should be conducted before role expansion is applied.

Keywords: advanced practice, radiation therapy, radiographers, radiologic technologists, role development, role expansion, therapeutic radiographer.

Introduction

Role expansion designates a specialist position enabling practitioners to operate at an advanced level with greater autonomy, responsibility and accountability. It embraces role extension by incorporating areas of practice that were not previously within the remit of a typical role.¹ However, role expansion does not define new scope of work that demands modifications in routine practice. The evolution of role expansion in healthcare can be traced back to the 1980s in the nursing profession, where it was driven by political, professional and patient-led demands.² Roles such as Patient Treatment Reviewer, Information and Support Radiation Therapist (RT), Research RT, Breast Planning RT and Image Reviewer have emerged with the aim of improving patient care.

Currently, Australia's progress towards role expansion has been modest. The Australian Institute of Radiography (AIR) has proposed a model that supports such a practice. Role expansion in Australia will provide opportunities for radiation therapists to broaden their career prospects and more importantly improve patient health care. Internationally, strong evidence has been put forward to support role expansion; however there is a lack of data in the Australian RT environment to support such advanced roles. This article aims to explore the current state of role expansion in RT internationally. While learning valuable lessons from other nations, it aims to gain an informed understanding of the possibilities of such work methods in Australia.

Method

A comprehensive search from 1990 to 2008 was undertaken to extract publications from electronic databases such as Scopus and CINAHL, individual journals such as *Journal*

of Radiotherapy in Practice and professional bodies (see Figures 1 and 2). Multiple sources were used to ensure that all data were included. Keywords such as radiation therapy, role expansion and advanced practice were derived from common terms relating to role expansion in Australia and internationally. An advanced search limited to the English language was conducted using the Boolean operator "AND" to gain an in-depth understanding of the topic. A total of 1,983 titles were initially identified by two researchers independently. All reviews were excluded from data analysis and were only used as generic material for background literature.

A third researcher verified the search by reviewing these titles to avoid selection bias.³ After the removal of duplicates, 93 titles were identified as satisfying the exclusion and inclusion criteria (Figure 1) and preceded to an abstract audit. Abstracts were incorporated if they utilised qualitative or quantitative methods of research. In total 40 articles were selected for a full review. To maintain inter rater reliability among the authors, a meeting was held where individual notes were collated to create final selection criteria. Fifteen articles progressed to critical review and data extraction (Figure 2). The reference lists of 40 relevant studies were also examined for additional research papers. However all these references were studies that had already been extracted through the search strategy. Thus, a total of 15 articles proceeded to a detailed critical analysis.

Results

This systematic review identified six roles: the patient treatment reviewer, image reviewer, and breast planning radiographer, informed consent radiation therapist, research radiographer

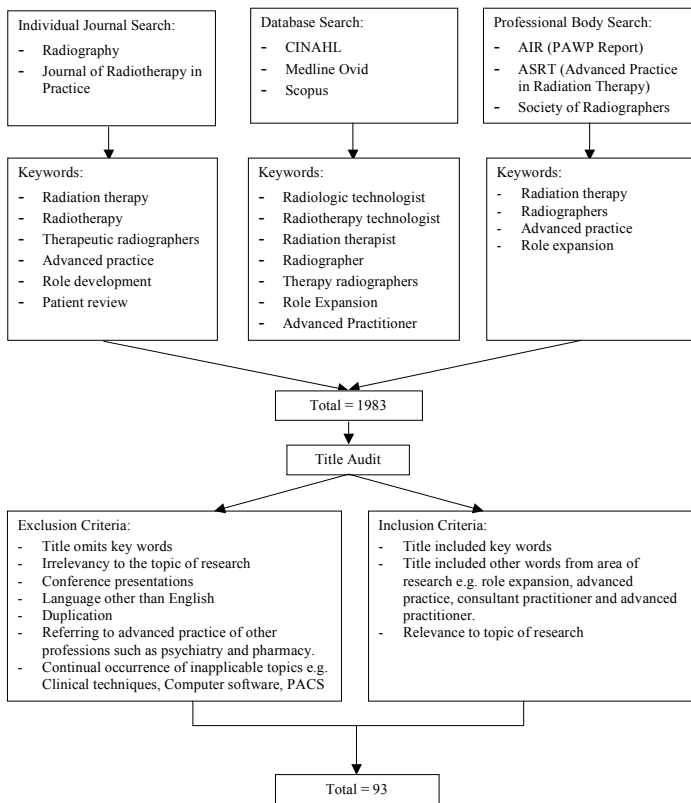


Figure 1: Search strategy A – sources and title audit (CINAHL = Citations in Nursing and Allied Health Literature, AIR = Australian Institute of Radiography, PAWP = Professional Advancement Working Party, PACS = Picture Archiving Communication Systems, ASRT = American Society of Radiologic Technologists).

and an information and support radiation therapist. The 15 papers that were reviewed are summarized in Table 1, which describes individual research methods, samples and summary findings of the papers. From a total of 15 articles, 11 used qualitative and four used quantitative methodologies. Overall, seven articles focused on the role of the patient treatment reviewer, with two studies in particular examining the benefits of this role from the patient's perspective and five articles reporting RTs' or other health professionals' perceptions of advanced practice. The role of a radiation therapist image reviewer was discussed in three papers, which investigated the advantages of this role to radiation oncologists and radiation therapists.

Roles such as breast planning radiographer, informed consent radiation therapist, research radiographer were tested in clinical settings in three individual articles. Last, two articles examined the role of an information and support radiation therapist.

Discussion

This review investigated the current international state of role expansion in RT. It provided a comprehensive summary of the available research literature which used valid research methods.³ Of the initial 1983 titles identified, only 15 articles described rigorous methods of evaluating role expansion and its effect in the clinical settings. The two main advanced RT roles identified, RT treatment reviewer and image reviewer RT, will be discussed below, along with a summary of several other roles found. The introduction of role expansion is an initiative to fulfill two primary goals: embracing innovative ways of service provision to maximise patient benefits and promoting flexible career pathways to retain highly skilled health practitioners.⁴ However, there is a lack of data in Australia describing or evaluating such advanced

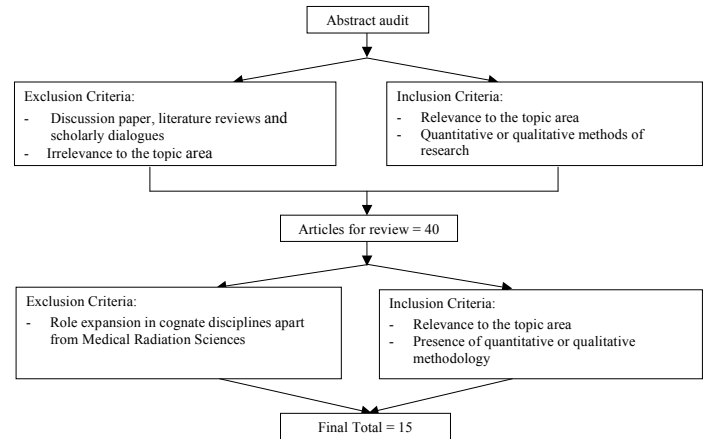


Figure 2: Search strategy B – Abstract and article audit.

practices. Therefore this review aimed to gain an understanding of the possibilities of role expansion in an Australian RT environment by learning lessons from international experiences.

Patient treatment reviewer

Patients undergoing radiotherapy are usually prone to side effects and can suffer from psychosocial problems such as depression and mood swings.⁵ As a result, they need to be monitored regularly. They also need to have any reactions to their treatment evaluated. Traditionally, patients have been examined during weekly treatment reviews conducted by the radiation oncologist (RO).^{6,7} However, these reviews are now being recognised as a possible area of specialisation for RTs.⁸ Clinical factors such as the need to minimise delays in radiotherapy services and an aging population have resulted in a rise in workload for ROs.⁴ Hence the role of the patient treatment reviewer is gradually permeating the RT domain.

Cancer patients need time and privacy during weekly reviews as they are often anxious about their prognosis and want to learn more about their disease and treatment side effects.⁴ The role of a patient treatment reviewer fulfils this demand as it involves private consultations between the patient and the treatment RT. Typically, the meetings begin with questions regarding the patient's response to treatment to date, followed by an evaluation of physical reactions, and moves into questions about the patient's general well being.⁹ McLroy, *et al.* noted that besides the medical issues, concerns relating to financial and marital problems were less frequently discussed with the ROs due to limited time, even though patients were distressed about these matters.⁴ Strong interpersonal and listening skills have been identified by Lees as core characteristics of the patient treatment reviewer.⁸

The idea of a RT-led review clinic is not a novel idea. The role was carefully examined in the UK, Scotland and Hong Kong as early as 2000.^{6,7,10} This review located seven research studies. Five groups examined the perceptions of RTs, ROs, medical physicists (MPs) and nurses regarding the implementation of the role. Only two articles provided analysis of this role from the patients' perspectives. It is vital to bear in mind that any form of role expansion must benefit patients and consequently, their satisfaction is of prime importance.¹¹

Researchers acknowledge that the patient treatment reviewer role has the potential to increase job satisfaction and that it adds value to the RT profession. Statistically significant findings from Shi, *et al.*'s quantitative study suggest that Singapore RTs are

Table 1: Summary of the reviewed articles.

(UK = United Kingdom , RT = Radiation Therapy or Radiation Therapist (RT), RO = Radiation Oncologist, MP = Medical Physicist, NHS=National Health Service).

Author, Date, Location	Type of Research	Sample	Findings
1 Role/specialty: Patient treatment reviewer			
Colyer, H (2000) UK	Qualitative phenomenological methodology: interviews.	3 radiographers.	The role of the radiotherapy treatment review radiographer better serves the need of radiotherapy patients as long as it is supported educationally and clinically.
Cameron, J (2004) UK	Qualitative case study: - Semi structured interview - Telephone interview.	Reflections of a senior radiographer.	RT's have the skills necessary to undertake the role of the treatment review radiographer.
White <i>et al.</i> (2004) Hong Kong	Qualitative: Questionnaires and semi-structured interviews.	285 questionnaires were sent out in 4 clinical oncology departments to nurses, MPs, ROs and RTs. A total of 14 RT's out of 285 were recruited.	Three main issues hindered the implementation of the patient treatment reviewer role: - No clear directives and guidance about advanced roles and practice. - A lack of willingness and support from other professions. - Poor collaboration amongst stakeholders such as Association of Therapeutic Radiographers (ATR).
Ellis, Ashmore & Bray (2006) UK	Qualitative: - Semi structured interview. - Telephone interview.	12 patients. 19 RT departments.	The results provided sufficient evidence to suggest that continuing with radiographer led review clinics would benefit the patient.
Lees, L (2008) UK	Qualitative grounded theory methodology: semi-structured interviews.	3 different departments - 7 radiographers.	The study identified the skills and knowledge needed for the operation of this role such as: - A master's level education - Well developed listening and interpersonal skills - "Enjoyment of the people side of the profession" (p.113).
McIlroy <i>et al.</i> (2008) Scotland	Quantitative study: a prospective survey and questionnaires.	1095 questionnaires were distributed to patients with a response rate of 79%.	RT's can effectively assess and support a range of patient needs through the role of a non medical weekly patient reviewer as reflected by the high patient satisfaction score of 99.7%.
Shi <i>et al.</i> (2008) Singapore	Quantitative: Observational study in phase 1+2 and questionnaires in phase 3.	Phase 1+2: 6 Oncologists. Phase 1+2: 240 reviews were observed in total. 29 questionnaires were handed out to RTs and 65 questionnaires were handed out to ROs.	RTs were significantly more positive than ROs when asked whether they could successfully advise patients on side effects and answer questions related to treatment technique ($P < 0.05$).
2 Role/specialty: Image Reviewer			
Suter <i>et al.</i> (2000) UK	A blind concordance study.	517 films were assessed.	RTs and clinicians produced similar accuracies in film assessment. This accuracy was sufficient to implement the role for radiographers. Prior to the study 91% of the oncologists were disturbed during clinics for film review. This reduced to 36% following the study where disturbances during clinics were infrequent. It increased the efficiency of film assessment and service delivery.
Holden, L & Loblaw, DA (2005) Canada	A concordance study.	95 RT's and 25 RO's were involved.	Excellent concordance of 96.1% between the ROs and RTs in evaluation of films. As a result of this success, the role was implemented permanently in the urban cancer centre.
Rybovic <i>et al.</i> (2008) Australia & New Zealand	Qualitative study: Grounded theory and constant comparative method of data analysis: Questionnaires.	46 radiation oncology departments were surveyed with 40 questionnaires returned giving a response rate of (87%).	RT's believed they possessed the competence required for performing this role via training and on job experience.
3 Role/specialty: Breast planning radiographer			
Welgemoed, C (2008) UK	Qualitative case study.	3 radiographers from 1 department.	In order to implement the role of the breast planning radiographers, there is a need to identify, standardise and coordinate the role at a national level.
4 Role/specialty: Informed consent			
Colyer, H (2007) UK	Qualitative study: An emailed survey.	63 United Kingdom centers: 58 were NHS centers and 5 were private radiotherapy services.	The possibility for such role expansion exists, but several hindrances are faced such as misunderstanding of legal and ethical frameworks, lack of professional confidence. There is a greater need for radiographers to develop themselves and assume full autonomy.
5 Role/specialty: Research Radiographer			
Academic Clinical Oncology and Radiobiology Research Network (ACORRN). (2007) UK	Qualitative study: Survey questionnaire.	67 head staff of 38 RT departments were surveyed.	The role of a research radiographer can improve radiation therapy and radiobiology research by instilling a custom of evidence based practice. However funding, training and support are required for the successful implementation of this role.
6 Role/specialty: Information and Support Radiation Therapist			
Colyer & Hlahla (1999) UK	Qualitative: content analysis of a questionnaire with open ended responses.	22 information and support radiographers.	The information support radiographer's role covered clinical, education, management and research. It was also concluded that such a role made a positive contribution to patient care.
Miller, C (2000) Ireland	Qualitative research: - Patient welcoming evening - Telephone follow up clinics - Patient educational DVD.	129 participants including patients, their family and friends.	The role of an Information and Support RT is supported. However further assessment of its benefits through research methods is necessary.

positive about undertaking the role.¹² RTs were significantly more positive than ROs when asked whether they could successfully advise patients on side effects and answer questions related to treatment technique ($P < 0.05$).¹² However, in general the ROs were supportive of this advance in practice.

When an enquiry was made in the UK concerning the views of ROs, MPs and nurses regarding the role of the patient treatment reviewer, a mixed set of responses was obtained, but all allied health staff and oncologists embraced the role after initial reluctance, resulting in its successful implementation in several UK departments.⁷ In fact, in one oncology department in the UK, the oncologists were unwilling to take back the care of their patients upon seeing the success of the role. Unfortunately, this support is not apparent in Hong Kong. White, *et al.*'s study shows that ROs have been unwilling to entrust some of their duties to competent RTs.¹⁰ Furthermore, nurses were resistant to handing over some of their duties even though RTs were competent.¹⁰ This was attributed to greater medical dominance in Hong Kong health departments than in the UK.

Although the studies of Lees, Colyer and Cameron provide adequate data, their small sample sizes compromise the representativeness of their findings.^{8,9,13} On the other hand, White, *et al.*'s and Shi, *et al.*'s quantitative studies have more robust data that can support such initiatives in Australia.^{10,12} Valuable lessons can also be learnt from comments of several participants in Lees' study: "Listening to people's problems all day everyday... quite wearing sometimes (participant G)". It is important to note that "personal characteristics such as the need to enjoy the people part" of RT is a crucial segment of the consultations. "I feel personally that the rad review service needs much more touchy feely people" (Participant F).⁸ Hence there is adequate evidence in the literature on the perceptions of RTs and other health and medical professionals concerning the role of the patient treatment reviewer. However, only two studies from the UK and Scotland investigated patient perceptions in relation to this role.

In Scotland, a quantitative study presented significantly positive results on the application of the RT patient review role, with a high patient satisfaction score of 99.7% in relation to time spent with review staff.⁶ Patients also commented on minimal waiting time for review and professionalism, friendliness and helpfulness of review staff. All negative comments were associated with non RT related factors such as traveling time and financial costs. The use of a large sample size of 1095 patients provided representative findings that can be drawn on when implementing such a role in Australia.

Likewise, the qualitative study of Ellis, Ashmore and Bray produced valuable findings.⁷ Patients used a Likert scale to respond to questions about the value of the service, giving a range of positive responses. The majority were very satisfied with the usefulness of the sessions and the reassurance and information that was received from RTs.⁷ These results provided sufficient evidence for the successful implementation of the role of patient treatment reviewer in the UK department. As this role begins to appear in the Australian healthcare system, further research on the impact of such practice in the Australian environment would be beneficial.

The establishment of expanded roles within non-medical professions is difficult and can cause substantial changes in hierarchical medical relationships. It is important to note that any form of role expansion is associated with legal and ethical responsibilities.¹⁴ Subsequently, it is of little surprise that oncologists may be reluctant to delegate tasks that they have been performing. However, unwillingness can be dealt with by providing adequate

educational support and training to RTs. The AIR recommends that a masters degree and a minimum of six years clinical experience in the area of specialty is suitable for advanced practice.¹⁵

Individual modules of study at master's level have also been developed at academic institutions in Canada, the UK and USA. Clinical based competency training under the supervision of clinical oncologists has been developed in Scotland. In the UK, RTs participating in role expansion activities were required to develop a planning portfolio of breast patients. This portfolio was assessed by the mentor who decided whether the RT was competent to undertake the role successfully. It is therefore suggested that Australian ROs may need to participate in training, supervised clinical practice and provide competency based assessments in order to determine the capability of RTs wishing to undertake advanced roles.

Radiation therapist image reviewer

The task of reviewing portal film images in external beam radiation therapy is essential and very common. Traditionally, image reviewing is performed by a combination of ROs and RTs. However this practice is changing as the need to improve service efficiency is recognised. As a result, the role of RTs is progressively being expanded to independently signing and assessing films during treatment and making decisions concerning field placement, which was conventionally within the scope of ROs' practice.^{16,17} This systematic review found three studies on the image reviewer RT performed in UK, Canada and Australia.

The UK and Canadian studies were quantitative and tested the role of the RT image reviewer. The study by Suter, *et al.* in the UK in 2000 began as a blind pilot study to assess RTs' ability in film assessment in comparison to radiation oncologists.¹⁷ The study was also aimed to demonstrate RT competency in image reviewing so that accepted practice could be altered. This was followed by a larger investigation in which a total of 517 films were assessed. Subsequently, 97% RT accuracy (95% CI; 95.9%–98.7%) was reported in comparison to the RO gold standard, which shows that RTs are capable of performing film evaluations independently. Similarly Holden and Loblaw in Canada in 2005 found 96.1% concordance between ROs and RTs in evaluation and approval of verification films.¹⁸ The large representative sample size of 873 films and high confidence interval of 95% increases the validity of their findings. The success of their findings led to the implementation of an image reviewer RT in both Canadian centres studied.

In the Australian RT environment, the role of a RT image reviewer is also being considered as a possibility. Like other roles, this role has not been formalized nor acknowledged.¹⁵ Rybovic, *et al.* in 2008 utilised a constant comparative method of data analysis to derive main themes from a survey of 46 organisations across Australia and New Zealand, a high representative sample with 87% response rate.¹⁷ One of the most prevalent themes identified in the study was training. RTs recognised the need to demonstrate learnt competencies on image reviewing via completion of formal training packages, competency based training or in-house training. In reviewing international literature, it is evident that ROs can play a vital role in providing training to RTs. Both the UK and Canadian studies considered the ROs' decisions of image reviewing as the final decision. Therefore perhaps within the Australian RT context, image reviewer RTs training can be aided with an advanced image review training package. This training package can be tailored to individual departmental protocols.

It is interesting that all three studies did not investigate the

benefits of this role for patients. For example, it is likely that allowing RTs to approve simulation images and isocentre moves on the treatment machine would markedly reduce patient waiting time on the simulation or treatment couch.

In Australia and New Zealand, image verification technology is commonly utilised, as electronic portal imaging devices are available in 90% of Australian and New Zealand facilities.¹⁹ The availability of such technology has enabled online reviews to be conducted where RTs commonly carry out clinical decisions regarding patient set-up correction. In fact in 5% of centres in Australia and New Zealand, image analysis and recommendation of corrective action is performed entirely by RTs, thus increasing service efficiency.¹⁹ In addition, the recent diversification of image verification technology has led to the introduction of kilovoltage imaging utilising cone-beam CT in image guided radiation therapy. It would be expected, therefore, that the image-review RT role will be extended further to include volumetric treatment imaging, which may necessitate additional training.

Other roles

Research is crucial for improvement of patient care as well as professional and personal development.^{20,21} However, it is acknowledged that RTs only minimally engage in research.²¹ Hence, a survey was conducted in the UK, sampling 67 Chief RTs across various departments. The study reported a response rate of 65.7% and concluded that the role of a research RT requires significant support and funding for its successful practice. It is clear from ACORRN's (Academic Clinical Oncology and Radiobiology Research Network) findings that introducing such roles in an ad-hoc manner can cause advanced practitioners to feel isolated, in need of time and training. As ACORRN reported, "some research radiographers finished research activities in their own time yet preferred extra training in topics like statistical analysis" (pp. 699).²² Nevertheless the role does improve research sustainability and can enable therapeutic radiographers to utilise their research skills.

In an effort to encourage research involvement amongst Australian RTs which will prepare them for professional advancement, an Associate Professor position has been funded by the NSW Cancer Institute.²¹ Furthermore, like therapeutic radiographers in UK; Australian RTs also acquire research skills during their university studies. Therefore having learned lessons from the UK experience of its implementation, the role of a research RT can be embraced within the Australian radiation therapy context.

It is imperative that individual patient needs are addressed to provide comprehensive treatment to cancer patients. The role of the Information Support Radiation Therapist (ISRT) aims to do this by giving vital education, information and support to patients and their families to facilitate smooth entry into treatment.²³ The role of the information and support RT is investigated in clinical settings in two articles. Miller in the UK in 2008 examined the role's contribution to patient services prior to the commencement of radiation therapy treatment.²⁴ The welcome evenings created to educate and prepare cancer patients by the ISRT were highly successful with patients commenting "I feel more confident, relaxed and less anxious about starting RT (pp. 3)."²³ A majority of patients were also satisfied with RTs dealing with their queries.

Similarly, Colyer and Hlahla presented collated data regarding the ISRT role's nature, scope, contribution and impact on cancer services in the UK.²⁵ A sample of 22 ISRTs was surveyed utilising a short questionnaire; resulting in a response rate of 64%.²⁴ The survey identified four major elements that encompassed the role,

including clinical practice, education, management and research. Implementation of the role did face hindrances such as medical dominance, limited resources and lack of autonomy, with misinformation considered the greatest problem encountered. However, the ISRT role contributed positively to patient care while raising the professional profile of RTs in the UK. Furthermore, the role of ISRT entails additional practices such as counseling, therefore highlighting the need for additional qualification and skills. Hence, in Colyer and Hlahla's article, eight ISRTs gained extra qualifications in counselling. The establishment of such a role in clinical oncology centres in Australia would be beneficial, as ISRTs can provide appropriate information and support that are beneficial to both patients and their families.

Traditionally, obtaining consent for radiation therapy treatment has solely been the domain of ROs. Recently, perceptions of who is an appropriate seeker of consent have changed, with the UK Department of Health articulating in the "12 key points on consent": that it is always best for the person actually treating the patient to seek the patient's consent.²⁵ Colyer aimed to investigate the implementation of the current consent policy in the UK, examining several professional groups to ascertain the most suitable staff responsible for acquiring patient consent during radiation therapy. An email survey of 45 radiotherapy service managers with a 76% response rate revealed that ROs gained consent for radiotherapy in 35 centres while in seven centres RTs were responsible for seeking patient consent.²⁵ The study also reported variability in obtaining consent with one centre gaining consent for only radical treatments and two other centres failing to do so entirely. This is of great concern as the provision of appropriate information about risks and side effects of treatment is necessary in order for patients to make an informed decision.

Colyer and Hlahla concluded that RTs were capable of gaining patient consent due to their direct association in treatment delivery to patients, despite having limited involvement in seeking consent at that time.²⁴ The role of a consent RT imparts higher autonomy and requires a broader body of knowledge while communicating risks associated with chronic radiation therapy side effects to patients. However, the role demands higher academic qualifications such as a postgraduate Masters Degree. This is evident from all five RTs who obtained masters qualifications and participated in development programs entailing supervised practice prior to assuming the role. Therefore the implementation of informed consent specialists in Australia may be useful with patient interests in mind.

The role of a breast planning RT encompasses marking up borders of the tangential, nodal and electron boost fields.¹⁵ This role was investigated by Welgemoed in an audit in the UK comparing waiting times before and after implementation of the role. The study revealed that there was a considerable reduction in waiting times, from four months to four weeks. After an annual review, the breast planning RT's role was further expanded to include signing off treatment volumes, training of junior registrars and obtaining pregnancy information. Welgemoed also concluded that there is a need to identify, standardise and coordinate the establishment of roles such as the breast planning RT.²⁶

Conclusion

A systematic review of international literature revealed that the topic of role expansion for RT has been thoroughly investigated in clinical settings internationally. Multi-disciplinary healthcare has seen a gradual breakdown of role boundaries and an acceptance by most professionals that provision of a high quality service is depen-

dent on a team approach.²⁷ This is a move beyond the immediate practice of a typical RT role and requires additional knowledge and skills as well as increased autonomy. From the data, the RT patient treatment reviewer, RT image reviewer, research RT, information support RT and breast planning RT were identified to be the most effective roles. However, these roles may not be the only ones that are useful. Advanced practice should be evaluated in an Australian context prior to implementation. Role expansion in the Australian environment has the potential to provide seamless services in a multidisciplinary health care setting. Radiation therapists who engage in advanced and consultant roles should adhere to protocols and work within an agreed framework of practice.

Professional practitioners who operate at higher levels of autonomy are obliged to provide higher patient care. If advanced practitioners perform below standard they can be liable for working outside the course of employment. Therefore in the UK during litigation, the professional standards of RTs who are competent for advanced practice are compared with the actions of medical practitioners placed in a similar situation in what is known as the Bolam Test.¹³ In Australia, the decision over legal liability is ultimately determined by the courts rather than by fellow professionals.²⁸ However those practitioners who undertake advanced practice will have their professional standards compared with those of medical practitioners by courts in cases of legal liability. Thus radiation therapists must be aware of the legal implications associated with role expansion.¹⁴ Ultimately, role expansion will only be feasible if it is capable of benefiting the patient, the health care system and the profession.

Acknowledgements

Assoc Prof Cox is funded by a grant from the Cancer Institute NSW.

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