

## Original Article

# Advanced Practice in Radiotherapy and Oncology: an interview with Angela Eddy, MSc, Senior Lecturer and Course Leader for the MSc Advancing Practice in Radiotherapy and Oncology at Sheffield Hallam University, Sheffield, UK

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*This is the first in a series of JRP interviews with individuals who have and are recognised for an expert knowledge in their subject area in radiotherapy and oncology.*

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## INTRODUCTION

AD: Good morning Angie, thank you for agreeing to be interviewed today on the subject of advanced practice, a subject that I know you have been researching and publishing on for a number of years, in support of your work towards your Doctorate studies.

Q Firstly, in your experience, how have you seen advanced practice grow and evolve in the UK?

I have seen a massive change over the years regarding how advanced practice is introduced and supported in both the clinical and the academic environment. When the concept of having a four tier structure in the profession was first introduced, (1) I was a Superintendent working in one of the pilot sites. What was viewed as advanced practice then, what they did clinically, where they fitted in the service, and how they were educated and trained has now changed significantly.

Back in 1995 therapy radiography as a profession had a low profile, the Calman-Hine report (2) which radically reformed cancer services,

didn't even mention therapy radiographers despite us being the only professional group who can deliver radiotherapy, a recommended treatment modality for 52% of cancer patients (3). The recognition of therapy radiographers as key players in the delivery of cancer services has come on considerably and I think the advanced practitioner role has done a lot to help that.

One of the key drivers of advanced practice was the Strategy for the Education and Professional Development of Therapeutic Radiographers (1) produced by the Society and College of Radiographers, the strategy was tested through a national project and included several 'pilot sites'. These centres were asked to evaluate what roles should be considered and what clinical tasks could be delegated to radiographers that were outside a traditional scope of practice. Common roles at that time were identified as patient assessment and review, breast mark up and portal image review. The continued increase in cancer diagnosis alongside staff shortages and limited equipment capacity drove the need to explore how services could be delivered more efficiently and safely. The Cancer Reform Strategy (4) identified this was going to be a long term problem and a 91% increase in activity was

needed by 2016. The National Radiotherapy Advisory Group (NRAG) acknowledged these targets could only be achieved by expanding the existing workforce and implementing the new models of service delivery.

The key issue NRAG (5) identified was that 20% of radiotherapy work was complex and *should* be completed by an oncologist; but the other 80% *could* be managed by advanced practitioners. This provided a window of opportunity for radiographers working in advanced practice roles. There is still some criticism that the four tier structure as a whole has not been widely adopted, but the number of advanced practitioners is growing, with 62% of centres planning to increase numbers further (6). In my experience as a course and module leader on the MSc Advancing Practice programme, I can see this reflected in the increasing number of individuals working in that tier that are applying for modules.

The number of technical specialists working in extended roles has increased significantly; which probably reflects the widespread adoption of Intensity Modulated Radiotherapy, Image Guided Radiotherapy, adaptive radiotherapy and introduction of stereotactic ablative radiotherapy (SABR). The increase in satellite and private centres has probably influenced this growth, and there will no doubt be a knock on effect when the new proton centres open.

AD: You mentioned earlier- A Strategy for the Education and Professional Development of Therapeutic Radiographers document, when it was launched one of its key objectives was to propose professional restructuring of the therapeutic radiography workforce- do you think the strategy drove the evolution of advanced practitioners in service or was this happening before the strategy was published?

AE: I think some centres had started to look at using the workforce in a different way, but the Strategy influenced and drove what we did in practice at that time, it provided a framework. The setting up of the national pilot site project and the recruitment of the radiotherapy departments was all about effecting change and managing issues around unacceptable waiting

times for patients. Some of that focussed on particular “bottlenecks in the service” e.g. around simulation for breast patients or patients having a weekly review by the Doctors where they would wait for hours to see a doctor. The pilot centres focus was around introducing the advanced practice tier as a way of managing those issues, and at the same time looking at where the Assistant and Consultant role would fit, so pilot sites had to be fully engaged with the Strategy.

Success was enabled when the pilot sites had ‘buy in’ from progressive oncologists and staff who supported the philosophy and welcomed the change. The pilot sites were chosen for their differences e.g. large regional centres versus smaller rural sites. In the latter the oncologist worked from a central location with no registrars to support their practice, so when they were physically off site to attend peripheral clinics they left a “gap” in the service which could be plugged by the radiographers. Other centres had vacancies for doctors/registrars and service managers could see the value of having advanced practitioners or Consultant practitioners fill the gap and meet a service need.

Now I think roles are created in a proactive rather reactive way, so rather than plugging the gap in the service, radiographers are identifying where and how high quality care can be delivered across the patient pathway and identifying where they can input, rather than just working in the historical professional silos we used to. Now we see radiographers moving into areas such as palliative care, living with long term conditions and managing the survivorship agenda. They are working across traditional boundaries and outside the acute hospital environment in peripheral clinics and the community.

Q How you would define the UK term ‘advanced practice’ and what roles do an ‘advanced practitioner’ undertake in Radiotherapy.

AE: I think we are fortunate in the UK because our professional body, the Society and College of Radiographers has clearly defined what ‘advanced practice’ is. The College of Radiographers Strategy for Educational and Professional Development states advanced practitioners have to be

*“working at higher levels of practice will have developed knowledge and expertise in a specific field of radiography, radiotherapy or across traditional and non-traditional boundaries or across a broad spectrum of knowledge”*

The advanced practitioner has an expert practice component to their work which reflects their clinical skills and expertise within their scope of practice. But they also have to demonstrate elements of one or more of the following: team/professional leadership, education and training, practice and service development, and research and evaluation.

The “title” advanced practitioner is not registerable with the Health and Care Professions Council, but accreditation as an advanced practitioner can be sought by submitting a profile of evidence to the College of Radiographers demonstrating work at an advanced level. Accreditation does not guarantee that the individual will be paid at a grade commensurate with an advanced practitioner, nor does it confer upon them the title of advanced practitioner, as these are negotiated at department and hospital trust level.

Advanced practitioners should only work within their defined scope of practice and job description, and acknowledge when they are at the limits of their competence, referring on to other professionals where appropriate. This is important because delegated responsibility as defined by the Royal College of Radiologists (7) is only supported when the referring Doctor is confident that the person they delegate the task to is competent. Being able to recognise the limitations of their knowledge and competence is important due to the legalities associated with working beyond their scope of practice. That is why education and training to underpin advanced practice is crucial and that competence to practice at this level is documented and supported by evidence.

AD: How has education and training developed to meet the needs of the advanced practitioners?

When I was involved in the pilot sites all departments had in house work based learning modules that were accredited by the universities,

but these were essentially run and delivered by the departments. There was some variation in how the modules were delivered and supported across the pilot sites which resulted in a difference in the “student experience”, and as the professional body was keen to have it accredited at Masters Level it was a natural progression to move this into the Universities and ensure equity in terms of experience and consistency in delivery.

By bringing it into the universities modules could then be built around the knowledge understanding and skills required for advanced practice as indicated in the Learning and Development Framework for Clinical Imaging and Oncology (8). Now a number of academic institutions provide modules and MSc’s that support the development of either site specific knowledge, technical expertise or the development of clinical competencies.

We need more research into education and training experiences of individuals working in these roles but we do know some factors influence learning in the workplace (9). These are organisation issues (staffing levels and time), role and practice issues related to competence development (skill acquisition, different practices and tensions, power balances and medical dominance, support and mutual respect, role definition and the scope of practice) and individual personal characteristics (previous experience, evolving autonomy in practice and perceived value of study)

This research has informed how individuals are supported on the MSc Advancing Practice at Sheffield Hallam University by the development of a tripartite agreement between the learner, the university and the employer which aims to support individuals when they undertake work based learning modules.

Universities need to remain flexible and responsive to the ever changing professional landscape of the advanced practitioner and their employer, and build useful employability skills into teaching and learning strategies to inform their professional development. These can either be formative tasks or part of the assessment, for

example one task might be around exploring the legal ethical and professional responsibilities associated with working at an advanced practice level with specific reference to the individual's scope of practice; or developing a business case for a service development.

AD: In reference to that Dr Heidi Probst (10) did some work on developing an intrapreneurial enhanced pedagogy to increase post graduate practitioners innovative behaviour, what personal characteristics and professional attributes are displayed by these practitioners?

AE: That work was very informative in terms of how modules can be structured and delivered to maximise intrapreneurial skills that advanced practitioners need. We know these are transferable workplace skills that are desirable to employers, and help advanced practitioners manage and effect change in practice.

In terms of personal characteristics I would say all advanced Practitioners need to be very resilient because they will meet barriers and resistance when they try to change practice, so they will have to be determined and persistent. Building resilience is something we are addressing in undergraduate programs based on another study by Probst (11) but it needs to feed forward into post graduate work too although the factors that impinge on building resilient behaviours may be different for post graduate practitioners.

I would like to see further research into the experiences and impact of advanced practitioners in practice, which could be facilitated by collaboration between universities and our diagnostic colleagues. This is especially important as we move towards having more advanced practitioners, and we rely more on image based planning and verification in our daily work.

AD: What aspects of oncology are advanced practitioners most likely to work in?

AE: As I mentioned before there is an escalation in technical roles mainly due to the rapid pace of change in technology and the complexity associated with some of the techniques as well as the adaptive way treatments are now planned and

delivered. In the past three to four years I am seeing more practitioners who are working across the whole of the patient pathway. Years ago roles such as on treatment patient assessment and review would be managing treatment side effects and radiographers would be physically located in the Radiotherapy Department. Now we are seeing practitioners working in site specific oncology, but across the patient pathway, for example, they may attend the patients pre-treatment assessment clinics, they will consent the patient for radiotherapy, and advise on treatment side effects and touch on broader issues such as sexual dysfunction, fertility, chemotherapy as well as offering a telephone follow up service. This continuity of care is key to ensuring patients don't fall through the gaps in the service and increases patient satisfaction.

Some of these roles are funded through alternative funding streams e.g. Macmillan and other charities, but the down side is that often the funding is often for a fixed term perhaps 2 or 3 years. It is a brave individual who takes up one of these roles and they have to invest a lot of time and effort in the role to make it work and they then need to provide evidence of the success of their role in practice. These roles require individuals to be proactive and innovative practitioners, I have noticed a real shift in the level these individuals are working at, and I would argue that some are actually functioning at a Consultant level, but the service does not want to pay more money. I guess, some practitioners are a victim of their own success.

AD: How do these practitioners contribute to service improvement?

AE: Undoubtedly they make a difference, by making the patient's pathway more seamless and identifying gaps in service provision. As a link person working between and across teams they can improve communication; and are ideally placed to measure quality and ensure any service improvement needs are identified, facilitated and co-ordinated.

Unfortunately most evidence of service improvement is either anecdotal or gathered at a local level and not shared through publication.

We need to measure the impact of these individuals in their roles more than we have done to date and share the information in the public domain. The current financial climate in the NHS makes this even more important, where value for money is important and the emphasis is on improving outcomes. The measurable outcomes from a lot of these roles are multi-dimensional but should be based on the scope of the individuals practice e.g. Patient satisfaction, waiting lists/times, better management of treatment co-morbidities etc. A decision needs to be made early on when the role is first introduced as to what should be measured, and when and how the results will be disseminated.

A tool to measure impact for nurse consultant posts has already been developed (12) which can be adapted to measure the impact of advanced practitioner roles. The toolkit helps individuals explore the impact of their practice and role across three important practice domains: the patient, the organisation and impact on other staff.

Having greater detail on the impact of these roles in practice may help secure funding, and validate the value of the roles for other departments wanting to introduce them in practice. A lot of people in these roles are now being asked why should we employ a radiographer, we could be employing a nurse or someone else on a lower pay grade. When the service has to consider the economics of which professional gives the best value for money, any evidence collected to support the wider impact of having a radiographer in the role will help.

AD: Given roles and scopes of practice are advancing, do you think there are any issues for the profession and the Regulation of the profession as titled as 'therapeutic radiographers' by the UK's Health and Care Professions Council (HCPC)?

AE: That's a tricky question because the role of the therapeutic radiographer has changed dramatically over the last few decades. By the nature of practice, individuals have always had to keep up with the rapid change in pace of technology and the impact that has on practice. It has always been a challenge to keep undergraduate

training a pace of this to ensure practitioners have the required skills and knowledge to practice safely. The technical advances, higher level of patient care skills, alongside knowledge of cancer survivorship and end of life issues are ongoing challenges. When practitioners graduate, their first posts competencies are very different than they were only a few years ago and this is paralleled right across the workforce from those involved in day to day delivery of radiotherapy to those in specialist roles.

The work environment and how the radiotherapy working day is managed has changed dramatically over recent years. At one time, radiographer's workload on treatment machines reflected the whole range of tumour sites, meaning individuals got a broad range of practice experiences, requiring individuals to have a wide range of skills and underpinning knowledge for all sites at any one time. Now it is common practice for radiographers and treatment machines to specialise in one aspect of oncology, for example head and neck or prostate, and for individuals to spend a long time in one place due to staff training implications and difficulties associated with rotating staff around the department.

The way work is allocated means that practitioners can be on the same treatment machine working in the same area of practice with very little variation in workload and without the opportunity to be work in other aspects of oncology. In the past, practitioners had the opportunity to gain a wide and varied experience and move around to learn about the constant changes in practice. One could view this as deskilling, providing less of a challenge and variety in practice that keeps practitioners up skilled, knowledgeable and also motivated. Satellite and private centres will also see a different range of patients than a large cancer centre that covers specialisms such as paediatrics.

AD: How can we manage this for the future of the profession?

AE: I think the challenge now lies in departments offering suitable career pathways that ensures they can retain highly motivated and talented

individuals by maximising opportunities for progression and increasing job satisfaction. We could argue that having advanced practitioner roles should help retain the workforce, but conversely I have spoken to individuals in advanced roles who feel they may be de-skilling their colleagues. For example a patient assessment and review radiographer may get patients referred to them for very basic treatment side effect care advice, which in the past would have been given by the treatment machine radiographers. So, by having these specialist roles, are we actually deskilling the workforce by removing some of the historical parts of the radiographer's role, or are we just managing the flow of the work in a different way?

I think again this comes back to some of the long standing confusion we have about what constitutes a traditional scope of practice, and how that may fit with extended role practice and advanced practice (13). For example an advanced practitioner would lead a team of radiographers that reviewed patients, and as the advanced practitioner they would undertake some service evaluation projects, teach across professional groups and participate in research projects that inform the review protocols. The individuals they would be leading may be in an extended role and would review the patient following protocols informed by the advanced practitioner, but they would not focus on the wider advancing practice skills such as leadership, service evaluation etc. We don't really have a name for these people who are in a tier between a practitioner role and an advanced practitioner, and I think this maybe where the term extended role practitioner may sit as a half-way house, and they would focus on extending the skill base needed to operationalise the role rather than the other pillars of advanced practice. This could be seen as the first step on the career ladder towards advanced practice and help individuals see some progression towards achieving advanced practitioner status.

AD: The government are currently undertaking a consultation exercise on allowing the regulation of radiographers to undertake supplementary and independent prescribing of medicines in the UK. What are your views on this?

AE: This is a positive and welcomed initiative, even though Radiographers have been able to prescribe medicines under patient group directions (PGD's) for some time, it does restrict practice. This would be a massive step forward, and being able to prescribe in agreement with the patients Clinical Management Plan (CMP) provides yet another opportunity for radiographers to work more effectively across all parts of the patient pathway making their journey more seamless. Being able to prescribe appropriate medication in a timely manner is yet another opportunity for the advanced practitioner to support and enhance the patient experience.

AD: Thank you very much for this invaluable insight into Advanced Practice in Radiotherapy, this has been really interesting and has answered a number of issues and questions that I had.

## References

1. A strategy for the education and professional development of therapeutic radiographers. 1999. The College of Radiographers. Working Party. C Beardmore, H. Colyer, A. Duxbury, K. Fell, E. Glean, J. Shepard, N. Sinclair.
2. Calman Hine report. 1995. A policy framework for commissioning cancer services: A report by the Expert Advisory Group on Cancer to the Chief Medical Officers of England and Wales Department of Health.
3. Delany G, Jacob S, Featherstone C, Barton M. 2005. The role of radiotherapy in cancer treatment: estimating optimal utilization from a review of evidence-based clinical guidelines. *Cancer*. Sept 15. 104 (6): 1129–1137.
4. Cancer Reform Strategy. 2007. Department of Health, London.
5. Radiotherapy: developing a world class service for England. 2007. Report to Ministers from National Radiotherapy Advisory Group. Department of Health, London.
6. James S, Beardmore C, Dumbleton C. 2012. A survey on the progress with implementation of the radiography profession's career progression framework in UK radiotherapy centres. *Radiography* 18 (3): pp. 153–159.
7. The Royal College of Radiologists. 1996. Advice on Delegation of Tasks on Departments of Clinical Radiology. Royal College of Radiologists, London.
8. Learning and Development Framework for Clinical Imaging and Oncology. 2008; The College of Radiographers, London.
9. Eddy A. 2010. Work-based learning and role extension: A match made in heaven? *Radiography* 16 (2): pp. 95–100.
10. Probst H, Eddy A, Eddy D, Cummings j. 2013. 2 INSPIRE: Increasing Intrapreneurial Skills through Pedagogy.

- Health and Social Care Education 2 (1): 25–29. DOI: 10.11120/hsce.2013.00018.
11. Probst H, Boylan M, Nelson P, Martin R. 2014. Early Career Resilience: Interdisciplinary Insights to Support Professional Education of Radiation Therapists. *Journal of Medical Imaging and Radiation Sciences* 45 (2014): 390–398.
  12. Gerrish K, McDonnell A, Kennedy F. 2011. Approaches to measuring the impact of nurse consultants on patient, professional and organisational outcomes. Report submitted to the Burdett Trust for Nursing. Sheffield Hallam University, Sheffield.
  13. Eddy A. 2008. Advanced practice for therapy radiographers – A discussion paper. *Radiography* 14 (1): pp. 24–31.