Technical Innovations & Patient Support in Radiation Oncology 17 (2021) 97–101

Contents lists available at ScienceDirect

Technical Innovations & Patient Support in Radiation Oncology

journal homepage: www.elsevier.com/locate/tipsro

Research article

An examination of Advanced Clinical Practice: Qualitative insights from therapeutic radiography advanced and consultant practitioners based in England

R.N.M. Khine [a,*], A. Stewart-Lord [b]

[a] School of Health Sciences, City, University of London, UK
[b] School of Health and Social Care, London South Bank University, UK

ARTICLE INFO

Article history:
Received 17 October 2020
Received in revised form 16 December 2020
Accepted 17 December 2020

Keywords:
Advanced Clinical Practice
Therapeutic radiography
Role development

ABSTRACT

Introduction: Therapeutic radiographers play a vital and changing role in the delivery of radiotherapy services treating patients with cancer. Advanced Practitioners (AP) and Consultant Practitioners (CP) in radiotherapy have developed advanced clinical skills and specialisms, enhancing the ability of the profession to offer a greater depth of cancer services and ease pressure elsewhere in the system.

The aim of this study was to define the opportunity and potential for Advanced Clinical Practice (ACP) roles in oncology services. Specific objectives were to explore local profiles, role development and opportunities for standardisation of ACPs in therapeutic radiography and to determine resource requirements to roll out and ensure continuation of the existing and new roles.

Material and methods: The research was addressed through a qualitative study design using focus groups. Convenience sampling was used to recruit therapeutic radiography advanced and consultant practitioners (N = 36) from the respective radiotherapy departments in England to participate in regional focus groups. Four regional areas were identified for inclusion. Data generated was analysed thematically.

Results: The findings are presented in four themes: ownership of professional identity, desire for standardisation and guidance, drivers of role development and self-directed educational routes.

Conclusion: Key findings from the focus groups indicated the need for standardisation in job descriptions, roles and responsibilities and a key understanding of career progression. The professional identity of the AP is acknowledged by independent, autonomous working; however, this can only be facilitated if the correct training is undertaken and the necessary support structures are in place to enable career progression. Challenges associated with role development are 1) lack of career and pathway guidance, 2) lack of clear educational routes, 3) lack of standardised roles.

Introduction

NHS England policies [1–3] have acknowledged approaches to delivering new models of care to include expanding health and care roles and ensuring a flexible workforce that can provide the high-quality care. Specifically, the document Allied Health Professionals into Action [4] proposed the use of AHPs (such as therapeutic radiographers) to transform health, care and wellbeing across the sector in supporting transformation of the workforce and optimise patient outcomes. One area identified was advanced level practice for clinical staff (termed Advanced Clinical Practice), where practitioners would develop advanced clinical skills and specialisms, in order to enhance the ability of the profession and/or department/service. Advanced Clinical Practice is defined as a level of practice characterised by a high level of autonomy and complex decision-making, underpinned by a Master's level award or equivalent that encompasses the four domains of clinical practice, management and leadership, education, and research, with demonstration of core and area-specific clinical competence [5].

In oncology services, opportunities for the development of advanced level practice and site specialist roles across clinical settings to support patient care have been clearly identified in the Cancer Workforce Plan 1: Delivering the cancer strategy [6]. The plan acknowledged that cancer alliances were developing service

* Corresponding author at: School of Health Sciences, City University of London, Northampton Square, London EC1V 0HB, UK.
E-mail address: Ricardo.Khine@city.ac.uk (R.N.M. Khine).

https://doi.org/10.1016/j.tipsro.2020.12.003

models and pathways to improve the treatment, support and experiences of people living with cancer and beyond. The new service models provide existing staff to develop new skills, roles and responsibilities to employ their expertise within multidisciplinary teams. Notably, it identifies seven initial priority workforce areas along the cancer pathway to meet the demands of personalised cancer services. One of the workforce areas includes Therapeutic Radiography, recommending the opportunity to upskill experienced therapeutic radiographers into Advanced Clinical Practitioner roles and exploring service models and innovative practice to improve delivery.

Therapeutic radiographers provide a significant contribution to the planning and delivery of accurate radiotherapy treatments using a wide range of sophisticated and technical equipment; yet also possess unique expertise and skills required to care for patients before, during and after radiotherapy. They are also able to demonstrate a high level of patient care, assisting patients to cope with the daily physical, emotional and psychological demands of having radiotherapy treatment [7]. As such it makes them uniquely placed to deliver integrated care across the radiotherapy pathway. Moreover, it is their extensive involvement in cancer care delivery that makes a therapeutic radiographer an ideal candidate for role development [8]. New roles at advanced and consultant levels of practice have been highlighted as key to streamlining, focussing care and supporting patients across the radiotherapy pathway [9–12].

The aim of the research was to define the opportunity and potential for Advanced Clinical Practice (ACP) roles in oncology services, with specific objectives to explore local profiles, role development and opportunities for standardisation of ACPs in therapeutic radiography and to determine resource requirements to roll out and ensure continuation of the existing and new roles.

Material & methods

Purposive sampling was chosen as the overall sampling strategy as it is generally used where there are small sample sizes consisting of 30 cases or less [13]. In this instance the cases refer to the different Radiotherapy Cancer Centres across England, which were purposively selected to gain opinions across a large geographical area. Convenience sampling was then used to recruit participants from the respective radiotherapy departments to participate in the regional focus groups. The sample included advanced and developing consultant practitioners who had progressed through the advance practice pathway (see Appendix for definitions). The regional areas identified were South, Midlands and the East, London and North. Thirty-six participants (N = 36) took part in the focus groups. Tables 1 and 2 lists the participants by region and indicates their role / speciality as an Advanced Practitioner or Consultant Practitioner.

A semi-structured focus group guide (see Appendix) was used to guide the focus group discussion. The researchers (ASL, RK) adapted the sequence and form of questions to gather follow-up information on answers and facilitate participants to tell their stories [14]. To ensure consistency and parity all four focus groups were facilitated by ASL and assisted by RK. In addition, it was important the researchers remained neutral throughout and avoided expressing any personal opinions to enhance the credibility of the results. Focus groups were audio-recorded with the participants' permission and then transcribed on Microsoft Word. Thematic analysis was used to inductively analyse the qualitative data collected using Braun and Clarke's [15] approach: familiarisation of data; generating initial codes; searching for themes; reviewing themes; defining and naming themes; producing a report. The two researchers reviewed the transcripts independently and then agreed the codes. Each transcript was then coded, and collective themes were agreed within the presence of an external academic (LB) to enhance credibility.

The study was approved by London South Bank University School of Health and Social Care Ethics Committee. All participants were provided with a participant information sheet and written informed consent was obtained prior to data collection. Data was anonymised to ensure confidentiality was maintained. Focus group participants were asked to keep the discussions confidential to the group. Anonymous data were stored securely on password-protected cloud servers within the University.

Table 1
Focus group participants and regions.

Region	Participants [n] and Role
South	Advanced Practitioner n = 6 Consultant Practitioner n = 4
Midlands and the East	Advanced Practitioner n = 5 Consultant Practitioner n = 1
North	Advanced Practitioner n = 5 Consultant Practitioner n = 4
London	Advanced Practitioner n = 10 Consultant Practitioner n = 1

Table 2
Specialities.

Consultant Practitioner	Advanced Practitioner
Head and Neck	IGRT
Palliative	Lung
Prostate	Head and Neck
Lung	Education and Training
Brachytherapy	Palliative
Colorectal	Neuro oncology
Molecular Radiotherapy	Breast
Gynaecology	Gynaecology
	Practice Development
	Urology
	Skin

Results

Four primary themes emerged in the focus group data: "ownership of professional identity"; "desire for standardisation"; "drivers for role development" and "education and development". The content of the themes are outlined in the subsequent section with quotations illustrating each of them.

Theme 1 - ownership of professional identity

This theme focussed on how participants perceived their own roles but also how they were perceived by the multidisciplinary team members and patients. Job titles were a visible label for participants professional identity and important to them, yet the focus groups revealed a variation of titles and inconsistencies of how these titles were applied within respective clinical departments. Although participants were recognised as advanced or consultant practitioners, this was not always reflected in their job descriptions. Participants preferred not to use complicated titles with difficult terminology when they introduced themselves to patients. The Consultant Therapeutic Radiographers (CTR) in particular noted that their title often confused patients, as it implied that they were medically trained. They were able to deal with this confusion by applying a range of ways in which they communicated with their patients.

"*I introduce myself as a radiographer. I'm open and honest about that. I don't go into detail about the extra training unless they ask, and they don't often point it out, or they don't, I'm surprised actually that they don't very often wonder where the doctor is at the mark-up session, they're quite happy*"

Participants acknowledged that their title was important when working with other healthcare practitioners as it provided them with a professional identity and showed their level of competence in terms of decision making. Participants also shared that their roles were often confused with other professional groups such as nurses. Several participants had found that patients tended to refer to healthcare practitioners as nurses.

"I've used my title more in a multi-professional team to try and make it clear that I'm not a specialist nurse, otherwise people will treat you like a specialist nurse and expect you to be doing that specific role in radiotherapy. I've had to make it quite clear that that's not my role."

Theme 2 - desire for standardisation and guidance

Although a recognised national definition for Advanced Practice across all health professions exists, the interpretation and understanding of the pillars of practice within the definition are not clear. Participants explained that their roles were predominantly focused on the clinical domain and found it difficult to demonstrate how they engaged in all four pillars of practice. The time to undertake these roles was identified as the most common challenge. Some of the participants were able to acknowledge how they engaged in the four pillars, yet they could not always clearly define their engagement, leading to blurred boundaries of roles.

"Where is your practice defined? Is it defined in your job description? Is it once you're titled as advanced practice? Is it your scheme of work where you will only receive certain types of patients?"

Concerns over the lack of standardisation and recognition of the additional roles and responsibilities undertaken by advanced practitioners which are often not reflected in their job descriptions or acknowledged by their employers were reported. Some felt that the roles were only developed to address a service need, or for cost saving, without any consideration of the individual development needs. Additional guidance in relation to role implementation, standardisation of roles and role boundaries was recommended. This was important particularly for new advanced or developing consultant practitioners. Some guidance was sought from the professional body, other advanced practitioners and shared interest groups.

"I found it difficult when I came into my role because I had a job description saying what the aim of the role was, but very little guidance as to how we are supposed to achieve that."

Theme 3 - drivers of role development

Participants identified service need as the reason for the development of their role. The changes and practice and the technological advances were often cited as the reasons for the evolution of the role.

"My role was very much based on addressing the service need as we have a shortage of Consultant Oncologists. This is an on-going issues, I think it's a national issue as well. They were prioritising the radical patients because of the targets but the palliative patients were waiting longer for treatments."

Clinical skills overlap was also acknowledged as a role development driver, with participants indicating that they took on roles that were previously undertaken by registrars allowing them to focus on more complex areas of practice. Moreover, participants identified that their roles were developed and evolved due to their own interest and personal drive by continuing in personal development and training.

"I sort of overlap with the registrars who've got their FRCR part 1 because they can prescribe the bone and brain mets"

"My role has not come through a departmental decision, it came about through my own choice and interest and pushing into a role that interests me. There is a niche market there"

Theme 4 - education and development

Participants shared educational career progression experiences that were characterised by lack of guidance or no official/standardised pathways. Participants were often frustrated with the challenges associated with career progression.

"There is no set pathway, is the problem I have found. I know speaking of roles where the consultant post has been built in mind with the training programme. I came into the role and, knew I needed to do a Masters"

Participants also raised concerns towards the lack of time to enable them to conduct research and produce publications.

"Carving out the time to allow you to actually write papers... You do need time out of your five days a week to allow you time to think, to read, to do your own literature reviews and then write things up. I found that there was no time for that."

Participants agreed on the importance to continuously train and develop skills even if they were not undertaking a formal accredited course. In addition, record keeping of the respective competencies and clinical skills training that they undertook. There was recognition of clinical skill and competency development to be underpinned by a theoretical framework and an academic award. Participants acknowledged the importance of other training needs such as research and leadership skills.

"I did do a research module and leadership module as part of my MSc...these were really essential modules... these give you those essential foundations really for advanced practice."

Discussion

The key findings from the focus groups demonstrated the need for standardisation in job descriptions, roles and responsibilities and a shared understanding of career progression. The professional identity of the advanced and developing consultant practitioner is acknowledged by independent, autonomous working [16,17] however, this can only be facilitated if the correct training is undertaken and the necessary support structures are in place to enable career progression. Similarly, in a study regarding advanced practice radiation therapy (APRT) roles in Singapore, a highly comprehensive and structured programme was key to ensure that the APRTs were equipped with the skills and abilities to execute the new role [18]. Role evolution is often characterised by mismatched, non-strategic educational pathways advocated by line managers or supervisors without any clear alignment with the strategic service needs. Additionally, by personal career progression needs and also

by the individual practitioner who are motivated to drive their own role development in order to meet service needs [19].

The role of advanced and consultant practitioners is not clearly understood by patients or other health professionals [20] and more can be done to raise the profile and highlight the necessity of the role to demonstrate the impact on patient pathways and service delivery [21,22]. An evaluation of advanced practice roles in Canada, acknowledged that role clarity is essential not only for the practitioner assuming a new AP position, but also for all others who are involved with, or impacted by it [23]. Furthermore, there are no clear examples of how the impact of the role were measured or acknowledged within the respective cancer centres. Variations across regions clearly highlight the need for standardisation of the roles to enable transparency and transferability of a skilled workforce.

Practitioners were aware of the four domain areas recognised within the definition of Advanced Practice, but healthcare practitioners in oncology were not able to clearly outline how and when they undertake these respective roles. Most of their time and responsibilities are associated with their clinical role and the patient pathway and even though they see the respective domain areas as one, they were not able to articulate specific areas of practice for education and leadership. Practitioners show a keen interest in undertaking research but are consistently challenged in gaining the time and support to undertake research specific activities within their day-to-day working [24]. Leadership is recognised as a key foundation of the advanced role with practitioners highlighting autonomous working and critical justification in their patient pathway decision making [25]. A very recent study [11] of advanced clinical practice amongst Allied Health Professionals supports the findings from this study and highlights disparity of working across the four domain areas of practice.

There is a clear lack of standardisation of advanced and developing consultant practitioner roles. Practitioners are continuously challenged with finding information to support their own professional and development needs within oncology. Even though they are highly regarded and valued by other professional groups in oncology, they acknowledged a lack of support for role development from some groups. Most roles are developed due to a service [26]. Hilder et al reinforce this issue acknowledging that the growing demand for services, the expansion of radiotherapy services and the rapidly changing technology have provided motivation for the development of APRT roles in Australia [27]. However, there is no formal measures put in place to capture the impact of these new roles other than patient throughput.

Key driving forces associated with role development are the lack of clinical consultants and registrars within sites specific areas such as breast, lung, head and neck which has resulted in the development of advanced and consultant roles in these areas [28]. However, it should be noted that Advanced and Consultant Therapeutic Radiographers were recognised as highly driven individuals who have negotiated and shaped their career pathways despite these challenges.

Career progression is the most important aspect of advanced and consultant roles, but they are continuously challenged in this area. Educational pathways are not clearly defined and even though practitioners accept the need for a higher-level education [29] they continue to question the validity of a full MSc and PhD to enable them to undertake the role. Practitioners recognise clinical competence and skill development as the most important aspect of their role but are required to demonstrate this at different levels.

Conclusion

The findings from the focus group enabled participants to tell their story and share experiences, capturing both the meaning and the context of advanced and consultant practice, thus producing useful knowledge that will help guide the development of Advanced Clinical Practice roles. However, a number of challenges exist and were noted as lack of career and pathway guidance, lack of clear educational routes, and lack of standardised roles

Recommendations

The findings from the focus groups have led to a number of recommendations regarding the potential for ACPs role within oncology.

Recommendations for service commissioners

- Work with clinical departments to ensure a coherent approach to career progression pathways for ACPs in Oncology.
- Explore further opportunities for new roles to enhance patient pathways and improved access to oncology services.
- Promote understanding of AP and ACP roles across the workforce and the public and ensure that titles reflect both professional identity and advanced practice, with consistency across professions.

Recommendations for employers

- Employers should support the development of the ACP under the four domain areas, as identified within the multiprofessional framework for advanced clinical practice in England (HEE, 2017).
- Ensure job descriptions and job roles outline the advanced practice roles and capabilities undertaken across all four domain areas, set out in the HEE (2017) framework.
- Promote an understanding of the role across all professional groups within Oncology services, and clearly outline how this role might differ from that of a clinical specialist.
- Consider the educational pathways to ensure that ACPs within Oncology are consistent across the allied health professions workforce, with attention to: banding, titles, job descriptions, funding and availability of educational preparation and continuing education.
- Provide support through a structured mentoring / coaching systems within the clinical service delivery.
- Put in place systems for evaluation to measure the impact of the role on patient pathways and service delivery.
- Work in collaboration with education providers to ensure that educational provision, which meets advanced practice core capabilities, is accessible for ACPs and supports career development.

Recommendations for education providers

- Work collaboratively with service commissioners and employers to provide accessible education for ACPs that meets advanced practice requirements and continuing education needs across the core capabilities, and profession-specific needs.
- Provide specified examples of career pathways for ACPs within Oncology to demonstrate how they can progress from practitioner to advanced practitioner and beyond.
- Provide opportunities for collaborative working to ensure all four domain areas are met within the ACP profile.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

We thank Professor Lesley Baillie for her assistance. We are grateful for support from the Society and College of Radiographers (SCoR) and from Health Education England (HEE) for funding this project.

Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tipsro.2020.12.003.

References

[1] NHS England. Five Year Forward view; 2014. Available from: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf (Accessed 10th September 2020).
[2] NHS England. Next steps on the NHS Five Year Forward view; 2017. Available from: https://www.england.nhs.uk/wp-content/uploads/2017/03/NEXT-STEPS-ON-THE-NHS-FIVE-YEAR-FORWARD-VIEW.pdf (Accessed 10th September 2020).
[3] NHS England. Long term plan; 2019. Available from: https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf (Accessed 10th September 2020).
[4] NHS England. Allied Health Professionals into Action: Using allied health Professionals to transform health, care and well-being; 2017a. Available from: https://www.england.nhs.uk/wp-content/uploads/2017/01/ahp-action-transform-hlth.pdf (Accessed 12th September 2020).
[5] Health Education England. Multi-professional framework for advanced clinical practice in England; 2017. Available from: https://www.hee.nhs.uk/our-work/advanced-clinical-practice/multi-professional-framework (Accessed 12th September 2020).
[6] NHS England. The Cancer Workforce Plan 1: Delivering the cancer strategy to 2021; 2017b. Available: https://www.hee.nhs.uk/sites/default/files/documents/Cancer%20Workforce%20Plan%20phase%201%20-%20Delivering%20the%20cancer%20strategy%20to%202021.pdf (Accessed 12th September 2020).
[7] Lawrence H. Experiences of being a therapy radiographer. Health SA Gesondheld 2012;16(1):p1–7.
[8] Society and College of Radiographers. Radiotherapy Moving Forward: Delivering new radiography staffing models in response to the Cancer Reform Strategy. London; 2009.
[9] PCUK and SCoR. The Prostate/Urology Specialist Cancer Workforce Provision of Specialist Therapeutic Radiographers in the Treatment and Care of Men with Prostate Cancer; 2015. Available: http://www.sor.org/sites/default/files/document-versions/2015_09_11_prostate_cancer_uk_scor_report_final_1.pdf (Accessed 10th September 2020).
[10] Khine RNM. The perceived professional and organisational impact of the Consultant Therapeutic Radiographer (CTR): a UK case study. J Med Imag Radiat Sci 2018;49(Supplement 1):7.
[11] Stewart-Lord A, Beanlands C, Khine R, Shamah S, Sinclair N, Woods S, et al. The role and development of advanced clinical practice within allied health professions: a mixed method study. J Multidis Healthcare 2020;13:1705–15. https://doi.org/10.2147/JMDH.S267083.
[12] Cancer Research UK. Full team ahead: understanding the UK non-surgical cancer treatment workforce; 2017. Available from: https://www.cancerresearchuk.org/sites/default/files/full_team_ahead-full_report.pdf (Accessed 10th September 2020).
[13] Creswell J. Research design: qualitative, quantitative, and mixed methods approaches. 4th ed. Thousand Oaks, California: Sage publications; 2013.
[14] Kvale S, Brinkmann S. Interviews: learning the craft of qualitative research interviewing. 3rd ed. Thousand Oaks, CA: Sage Publications; 2015.
[15] Braun V, Clark V. Using thematic analysis in psychology. Qual Res Psychol 2006;3(2):77–101.
[16] Booth L, Henwood S, Miller PK. Reflections on the role of consultant radiographers in the UK: what is a consultant radiographer? Radiography 2016;22(1):3843.
[17] Price RC, Miller L. An evaluation of the impact of implementation of consultant practitioners in clinical imaging. Report to the Society and College of Radiographers, 2010.
[18] Hoom Lim L, Pei Ping Pang E, Jadva-Patel H, Mei Mei Wong S. Perceptions on site-specific advanced practice roles for radiation therapists in Singapore – A single centre study. Techn Innov Patient Supp Radiat Oncol 2020;13:17–20.
[19] Hawes N. Demystifying the role of the consultant therapy radiographer. Imag Oncol 2009:6–11.
[20] Rees Z. Consultant breast radiographers: Where are we now? An evaluation of the current role of the consultant breast radiographer Radiography 2014;20(2):121–25.
[21] Field L, Snaith B. Developing radiographer roles in the context of advanced and consultant practice. J Med Radiat Sci 2013;60:11–5.
[22] Ekmekci O, Turley C. Who wants (to be) a therapist? Promoting professional identity. ASRT Radiat Therap 2008;17(1).
[23] Harnett N, Bak K, Zychla L, Gutierrez Warde P. Defining advanced practice in radiation therapy: a feasibility assessment of new healthcare provider role in Ontario, Canada. Radiography 2019;25:241–9.
[24] Harris R, Paterson A. Exploring the research domain of consultant practice: experiences of consultant radiographers. Radiography 2016;22(1):25–33.
[25] Snaith B. Developing radiography leadership: trainee consultant roles. Imaging and Therapy Practice January: 2011;6–8.
[26] Hardy M, Snaith B. Role extension and role advancement - is there a difference? A discussion paper. Radiography 2006;12(4):327–31.
[27] Hilder B, VanDam P, Doherty K. Advanced practice radiation therapists: an Australian context. J Med Radiat Sci 2018;65:137–47.
[28] Department of Health. Radiography skills mix: a report on the four-tier service delivery model. London; 2003.
[29] Price RC, Edwards HM. Harnessing competence and confidence: Dimensions in education and development for advanced and consultant practice. Radiography 2008;14:65–70.