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Understanding the education and training requirements of advanced practice within specialist roles in radiography.

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Background

Advancing practice has developed organically as a form of role extension since the 1990's (Leary and MacLaine, 2019). Predominantly found in the field of nursing where a foundation of transferable skills unpins their development. In radiation therapy, therapeutic radiographers / radiation therapy technologists (RT/TR/RTT) possess the necessary expertise, skills and knowledge making them uniquely placed to support advanced practice across the radiotherapy pathway (Khine, Stewart-Lord, 2021). However, the concept can be misunderstood since those foundation 'nursing' skills are not required by all within the specialisms such as in radiation therapy. Advanced practice in England is defined as:

Advanced clinical practice is delivered by experienced, registered health and care practitioners. It is a level of practice characterised by a high degree of autonomy and complex decision making. This is underpinned by a master's level award or equivalent that encompasses the four pillars of clinical practice, leadership and management, education and research, with demonstration of core capabilities and area specific clinical competence.

Advanced clinical practice embodies the ability to manage clinical care in partnership with individuals, families and carers. It includes the analysis and synthesis of complex problems across a range of settings, enabling innovative solutions to enhance people's experience and improve outcomes.

Figure 1 [*HEE, Multi Professional Framework for Advanced Clinical Practice in England \(2017\).*](#)

Consistency of education and training was addressed in England, with the publication of the 2017 Multi professional advanced practice framework (HEE, 2017). A monumental document, that provides structure and focus for education and training in advanced practice, it is applied with some ease into

'traditional' advanced level practice roles, however its application within specialism is more challenging due to the niche requirements of the advancing roles. To provide further detail for education and training, within the specialism, England started to 'credential' multiprofessional frameworks by the Centre for Advancing Practice (CfAP) in 2020, these are defined within specialism to provide further guidance in education and training.

Also in 2020, in the north of England, a service review of non-surgical oncology services (systemic anti-cancer therapies, radiotherapy and acute oncology services) found a significant risk to provision due to the lack of available medical and clinical oncologists. A similar undertaking was completed by the critical care services where they identified the role of an expert practitioner trained to work at an advanced level of practice. Often identification of roles comes from a workforce shortage, however, these are career opportunities for those who wish to training to expand their role. In 2020, it was identified that an education and training curriculum within specialism was needed to support the development of those working at an advanced level of practice in non-surgical oncology and align with the national multi professional framework (HEE, 2017).

The Non-Surgical Oncology Advanced Practice (NSOAP) framework was born as a result of the need for a curriculum within specialism to support the traditional advancing practice skills inclusive of critical thinking, critical reflection, clinical decision making, increased responsibility and self-awareness across expert clinical practice, education, leadership and management and research. But, to also embed specific oncological knowledge and skill within the specialisms.

Development

The non-surgical oncology advanced practice framework is underpinned by the Royal College of Radiologists (RCR, 2021) and the Joint Royal College of Physicians (JRCP, 2021) speciality registrar training documents, and the multi professional advanced practice framework. The NSOAP uses Capabilities in Practice (CiP), a high-level learning outcome, that indicates the confidence, competency and capability that is expected by the practitioner, provided with a selection of descriptors that provide guidance on how the CiP can be achieved (RCR, 2021). The CiP and the descriptors do not indicate treatments or interventions, so the knowledge and skills are applicable to current and evolving practice. A selection of 'core' CiPs, provide a structure of education and training of the underpinning behaviours and application within clinical expertise, education, leadership, and

research. The 'common oncology' CiPs ensure a foundation of underpinning oncology knowledge, regardless of the 'root' profession (registrant profession) of the practitioner. All practitioners will have a foundation of knowledge of systemic anti-cancer therapies, radiotherapy, acute oncology, and onco-geriatrics, regardless of their advanced scope of practice. A wider knowledge base ensures a fully informed clinical decision, mitigating and managing risk, providing improved safety for the patient, practitioner, and the service. In the final category, 'specialism' CiPs, the CiPs can be selected as per the advanced scope of practice of the practitioner. Therefore, the CiPs provide guidance for education and training on the underpinning knowledge, skills and behaviours of practitioners working at an advanced level of practice, with CiPs that can then be applied to the individual scope of advanced practice means the practitioner has a defined and specific education and training pathway.

Assessment of the CiPs is via a combined approach of work-based and academic assessment. Within the workplace the educational and associated workplace supervisors assess competency by entrustment. Entrustment levels were first introduced within medical training in 2005 (Ten Cate, and Taylor, 2021). They are an intuitive assessment method defined by the level of trust a delegating colleague has in the practitioner to undertake the task.

As part of the development of the NSOAP, the importance of governance was included. Although often seen as being out of the remit of curriculum development, it is an imperative part of successful implementation. In England, the governance maturity matrix (HEE, 2022) allows employers to self-assess to ensure they are ready to implement these roles into practice. Requirements include: an appropriate job description, defined scope of practice for training and completion of training that should be continuously reviewed, a job plan, time to study and appropriate supervision.

What the NSOAP does identify is the need for a portfolio to support those training and working at an advanced practice level. This is outside the current scope of the project but needs to be considered moving forwards.

Challenges and barriers to implementation.

Wider awareness of the requirements of education and training for those working at an advanced practice level within specialisms is lacking. A local evaluation on the NSOAP found that practitioners felt misunderstood in what they brought to the role due to their 'root profession' and lack of

understanding within the service and what was required of them within the role. Advancing practice within nursing seems to be better understood and the principle applied to all, with in specialisms, roles are niche and the practitioner maybe the only one hold an advanced practice role/ niche scope of advanced practice within that employer or even that region. Practitioners within specialism working at an advanced practice level have the potential for unique innovation due to the application of a different skill set and professional experience. A supportive workplace culture is key for those in role to flourish and drive service delivery. Consideration of adequate job planning for the four pillars of practice, at an advanced level, is of paramount importance. Managers need to ensure this is planned effectively to gain the greatest benefit and to demonstrate the positive impact of the advance practitioner role. (Stewart- Lord, et al, 2020)

The challenge of operational service delivery means that governance of roles can be impacted. Implementing the required governance can be time consuming and resource intensive, in an already depleted service. By challenging the workplace culture, mavericks and supporters of advanced practice can explore the impact on patient care and service delivery showing the positive impact that is more than patient metrics, but the impact across the service.

Supervisors have a huge role in implementing a change in workplace culture, however supervisors also need to be supported within their role in the education and training of the practitioner at an advanced level of practice. Appropriate time allocation should be given to the supervisor to support the trainee, both will then feel empowered by the time invested.

Enablers to implementation

Although barriers can have a negative impact on the implementation of advanced practice, the enablers provide a positive light. Although the NSOAP is a multi-professional framework, it provides opportunity for innovative service delivery, where practitioners can apply the knowledge and skill from their 'root' profession as a solid foundation for further development. In some circumstances this may include practitioners crossing professional boundaries and develop in areas of practice that were not seen as part of their profession: for example, a radiation therapist working in acute oncology.

Enablers: Patient

The patient is at the forefront of any development of a practitioner or a service. It is noted the positive impact advanced practitioners can have on patient care (Oliveira et al, 2022).

Advanced practitioners have more time to listen and support the patient, being a consistent presence in the patient pathway means they build a strong rapport where the advanced practitioners can advocate for the patient throughout the patient's journey. For many practitioners this is the reason they entered the profession, because of the increased patient contact, therefore this can bring a great deal of satisfaction for those who find this an important aspect of their working career.

Enablers: Organisation

Often the clinical pillar is seen as the most significant in showing impact of advanced practitioners (Oliveira et al, 2023). Consideration of the unique 'root' profession skills that practitioners bring to the service, should be encouraged to evolve. Having practitioners with a different way of 'thinking' drives innovation and creativity in service delivery across the four pillars of practice. Streamlining services though service evaluation can have a fiscal impact on the service which can be challenging to measure. In addition, positive role modelling by advanced practitioners, encourages retention of experienced staff who can envisage themselves developing their skill set to positively impact the organisation.

Enablers: Profession.

As a profession, RT/TR/RTT are considered to have a low profile in comparison to other professional groups. However, the professions reputation in advancing practice is growing. For instance, in England the development of the Education and Careers Framework (2022), from the College of Radiographers, has clearly evidenced the career progression in the profession in the UK. With a growing motivation to see advanced practice more than medical replacement or medical task sharing, the NHS Long Term Workforce Plan (2023), strongly supports advancing practice roles to support service delivery. Within RT/TR/RTT, the passion to support our patients is evident and embedded within our altruistic characteristics required to fulfil the role. Opportunities to develop these skills further provides a career structure that is motivational driving the best from those within the profession.

Conclusion

The potential of advancing practice in supporting services is growing exponentially. To support this growth within Radiation Therapy/ Radiotherapy, structured and standardised education and training is required. Within some roles a 'generic' education and training pathway maybe appropriate. However, within specialism, the advancing practice roles needs to be underpinned by education and training that exploits the 'root' profession skills, building on a sound foundation in non-surgical oncology. The availability of the non-surgical oncology advanced practice framework is the first step to formalising education and training within the specialism. Coinciding with clinical practice, collaboration on capturing evidence of successful implementation and impact with measure its true success.

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