A training framework for multi-professional advanced level practice in non-surgical oncology: The journey through development and consultation to consensus

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Introduction

Cancer care is multifaceted, and treatments vary depending on the type and stage of disease. Non-Surgical Oncology (NSO) refers to treating patients without surgical intervention and includes such provisions as radiotherapy and Systemic Anti-Cancer Therapies (SACT). Common to other healthcare specialities the NSO workforce in the United Kingdom (UK) is under-resourced and lacks personnel with an anticipated 21% shortfall in oncologists by 2028.[1] Alongside this, therapeutic radiographers have an 8% vacancy rate.[2] There is acknowledgement that diversification of the skills mix can help mitigate the workforce challenges providing an innovative use of expertise across the service, positively impacting service delivery and patient care.[3] There is growing evidence that such roles also offer significant improvements in teamwork, quality, and safety of care, and has a positive impact on staff retention.[4] Within oncology, the skills mix is mature but has developed organically, with extended practice roles expanding exponentially over the last twenty years.[5] This has led to a lack of standardisation of roles, responsibilities, and training, as well as inconsistency in terms of role title and pay.[6]

Within other healthcare specialities such as general practice, emergency medicine and intensive care training frameworks have been developed based on the Multiprofessional Framework for Advanced Clinical Practice in England (MPF) published in 2017.[7] This provides an opportunity for other specialities to establish educational standards, particularly where different professions work in combination, and often interchangeably, across a speciality. Following a North of England regional service review, the opportunity for a framework in NSO was first initiated. The review projected a workforce shortfall, due to under-recruitment further compounded by retirements.[3] Within this single region the geographical remoteness had influenced low recruitment numbers from outside the region and had relatively low clinical oncology training numbers.[1,3] The review highlighted the potential that roles such as advanced clinical practitioners (ACPs) and advanced practitioners (APs) could have on services but, there was no specific education and training pathway to their development. Therefore, to train such a workforce in NSO efficiently, effectively and to a high and consistent standard matched to other specialities there is a requirement for a specific training framework. Opportunely at a similar time, a national project group was investigating advanced-level practice within therapeutic radiography, with initial recommendations supporting the need for standardisation of education and training. [6]

This paper describes the evolution and iterative development of a national NSO training framework including a review of its relevance to diverse roles within the speciality at this level of practice. It also sought through a Delphi consensus approach to identify the suitability of the capabilities included within the framework and identify potential barriers and enablers to its implementation.

Background to the framework development

The NSO training framework was informed by the joint speciality training curriculum of the Royal College of Radiologists (RCR)[5] and the Royal College of Physicians (RCP),[8] elements were used with permission. These curricula are established, well-evaluated and robust and include embedded clinically meaningful workplace-based assessments. To be adapted for multi-professional advanced practice an inclusive working party, in addition to a core group of experts, representing the key professions in the speciality (for example, clinical oncology, medical oncology, pharmacy, medical physics, therapeutic radiography, nursing and allied health professions (AHPs)) including clinicians and academics was developed. It is important to note that the NSO training framework is not to cultivate 'mini doctors' but to afford those healthcare practitioners working at the advanced level of practice equivalence in the breadth of education and training. It is acknowledged that historically roles are often described through the completion of 'tasks,' however to enable workforce innovation there is the requirement to have the practitioner with the right expertise, knowledge, and skills, in the right place and at the right time.[9]

The NSO training framework was deliberately designed to use the same terminology as the RCR/RCP curriculum, increasing readability across the professional groups. Within this the key expectations are described as capabilities in practice (CiPs), high-level learning outcomes to support academic and clinical learning and subsequent evidence.[3]

The CiPs are organised into three specific groups:

- **Generic CiPs (1-6)**- All individuals must complete the generic CiPs to the stated entrustment level (covering the four pillars of practice and the attitudes and behaviours expected at this advanced level).
- **Core Oncology CiPs (7-11)**- All individuals complete all the Core Oncology CiPs to the stated entrustment level (aligning all NSO ACP/APs with the same underpinning oncology knowledge across the patient pathway).
  Specific CiPs (12-19)- Chosen by the co-ordinating workplace supervisor (CWS) and the employer to meet the needs of the individual's scope of practice (**for example Figure 1**).

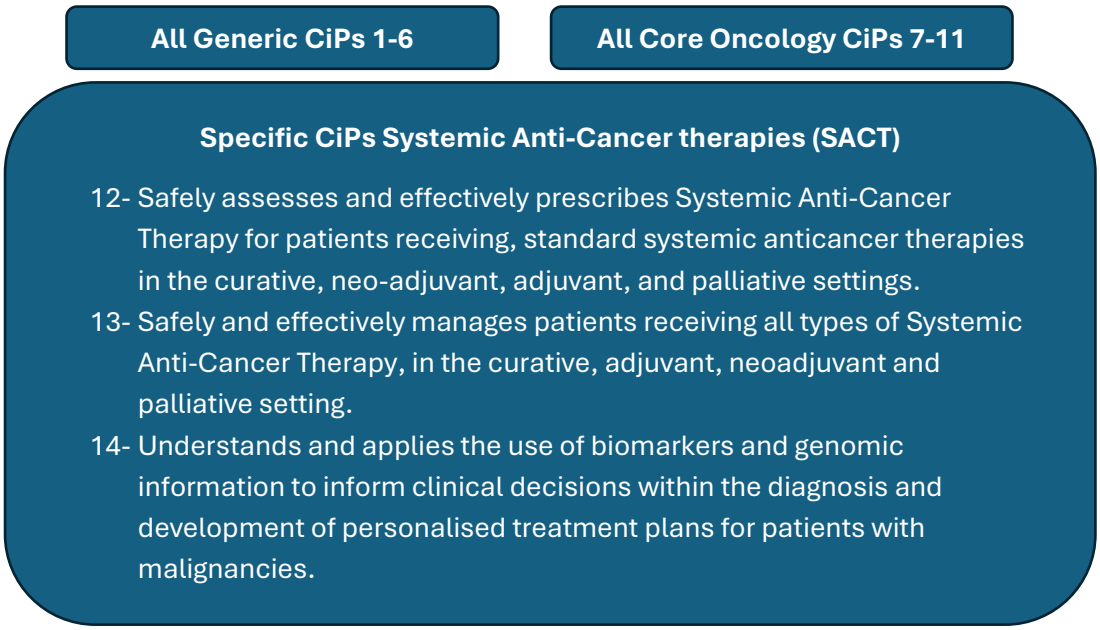

Figure 1 An example pathway and CiPs for an advanced practitioner in systemic anti-cancer therapy (Figure courtesy of the authors).

The assessment of the CiPs is aligned to 'entrustment levels,' a method of articulating the supervisors 'trust' in the individual when competently completing a specific task or element of practice against their advanced scope of practice.[10] The trainee must apply academic learning in their practice and undertake workplace-based assessments to evidence achievement of the competency. Maintenance of the individual's competency will be reviewed continually through the appraisal process within the Trust. This assessment process embeds Millers' assessment of clinical competency. (**Figure 2**) [11]

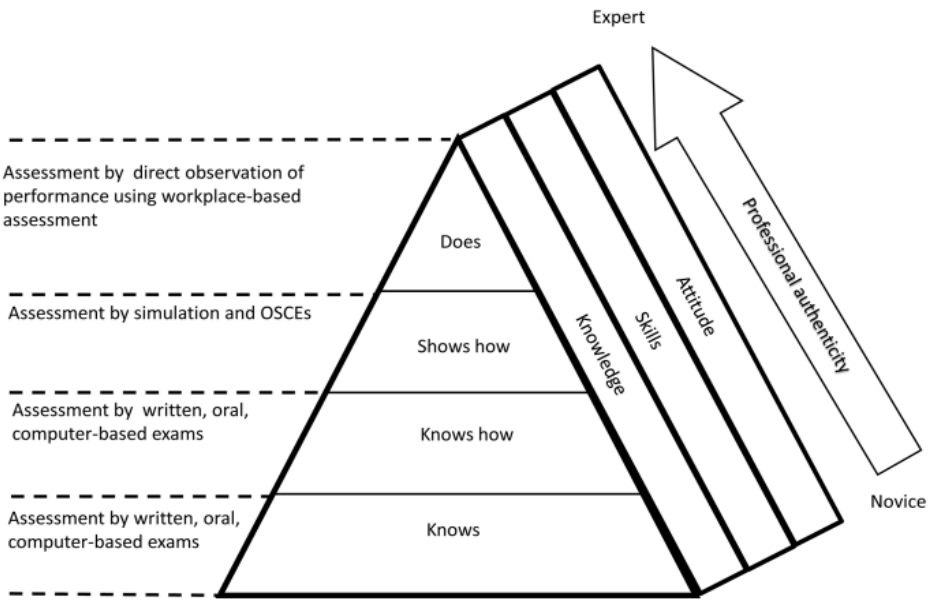

Figure 2. Miller's Pyramid of Clinical Competence (modified from Miller)[11]

Methods

Through a multiphase design (Figure 3) with the inclusion of relevant literature, the development of the framework was initiated. The CiPs and appropriate entrustment levels evolved with discussion within an inclusive working party in consultation with the local NHS faculties and the NHS England Centre for Advancing Practice (CfAP). The framework was initially tested in a regional context in late 2019 to investigate the feasibility of using it in practice and with perceptions amongst supervisors, employers and practitioners.[3] The outcomes supported the development of this into a national NSO training framework, although the title has evolved throughout its development due to external influences. At the time of the national consultation, it was recognised as a curriculum with consideration to be developed into an NHSE credential (a recognised unit or programme of learning). To allow clarity it will be referred to as the NSO training framework throughout this paper.

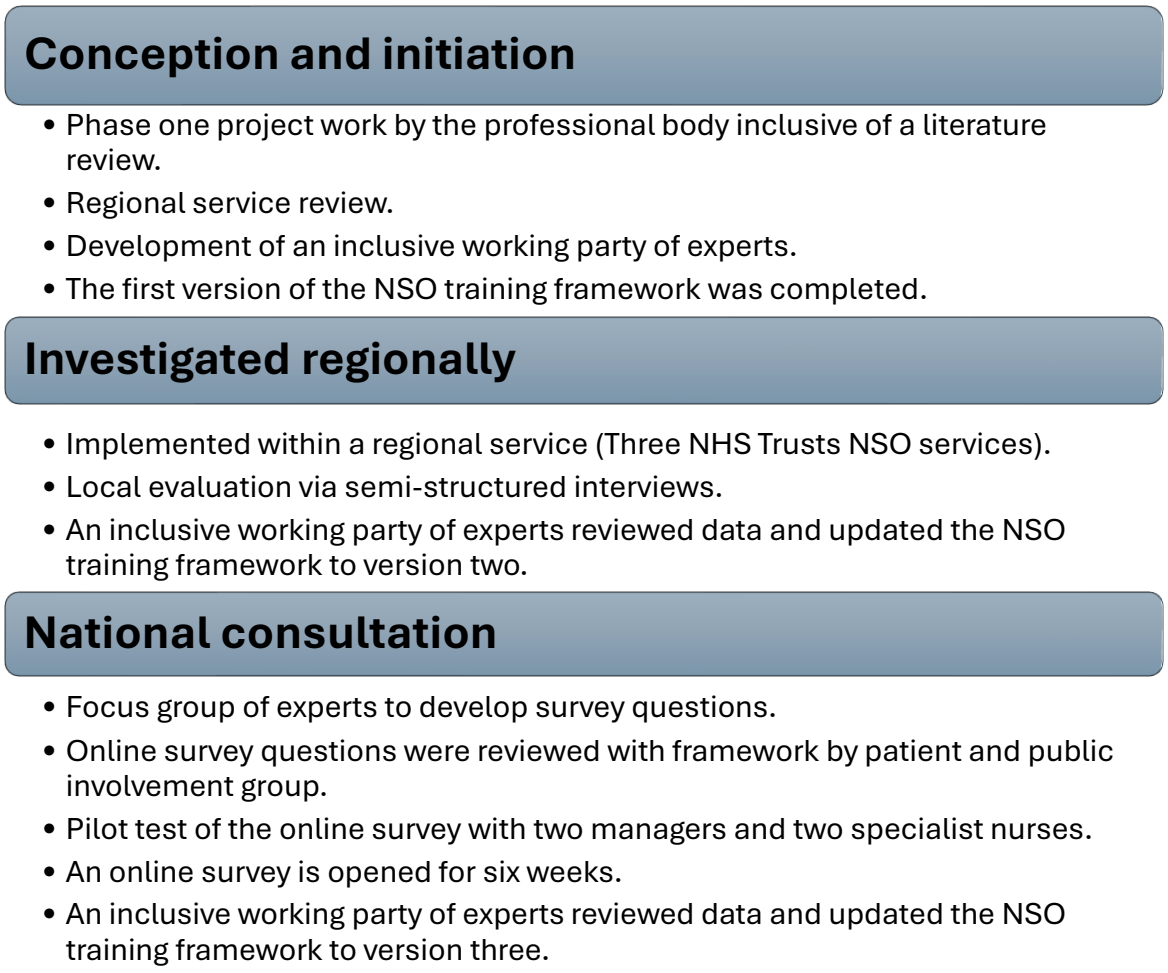

Figure 3- Multiphase design (Figure courtesy of the authors).

Following the initial development and regional testing the framework consensus on its applicability to the whole workforce across the UK was initiated in 2022. Although this framework was initiated in conjunction with NHS England, the UK devolved nations

were included to gain an inclusive opinion. Applying a modified Delphi approach, seen to be beneficial in curriculum design,[12] allows consideration of the diversity of professions and roles across the speciality.[13] This is preferred to a nominal group technique where anonymity can be affected, supporting the Delphi technique to gain wider engagement. Ethical approval was gained from the lead author's employer ER49799787.

Survey development

In collaboration with key stakeholders, including the radiography professional body (College of Radiographers (CoR)), local NHS advanced practice faculties and education providers with expertise in advanced practice, a survey was developed using a focus group approach. The online survey, designed so it could be for different rounds of the Delphi process, included closed questions asking the opinion of participants of the framework, the CiPs and the included supervision requirements. In addition, for the first round, the survey also included open questions to gain views on the frameworks' relevance to practice and perceptions on how this could be implemented in practice. The questions and framework were also shared with a patient advisory group for further scrutiny, as is expected in such a development. The Microsoft Forms online survey was subsequently piloted by two radiotherapy service managers and two lead cancer nurses to ensure content and face validity, particularly across multi-professional boundaries. [14]

To evaluate consensus a standard deviation (SD) was established at a defined level of agreement among the participants.[15] Consensus was considered by the working party to have been established when 70% of the participants agreed with the survey components, confirming their support for the framework design, content and language.

Data collection and analysis

Expert participants were approached using a social media strategy alongside the researchers' networks and invitations to all oncology departments across the UK. Key national informants were invited including the CoR, UK Oncology Nurses (UKONS), the Institute of Physics and Engineering in Medicine (IPEM), the RCR, the RCP, the Royal Pharmaceutical Society (RPS) and NHS England together with its CfAP. No response rate was defined as the participants were sought from across the UK, professional groups and roles.

Alongside responses to the elements of the proposed framework anonymised demographic data was collected to evidence the equality, diversity, and inclusivity of participants. Assumption of consent was applied by the completion of the survey, with no identifiable data reported other than role title to verify the breadth of participants across professions and speciality areas. Once the data had been entered there was no opportunity to withdraw or amend responses. The survey remained open for six weeks with regular promotion to increase the number of participants to ensure

representation across professional groups and geographic areas.

The Microsoft Forms data was held on a university Microsoft (MS) account accessed via a password-protected device and was downloaded onto Excel for descriptive analysis. Analysis of the qualitative response data utilised Braun and Clark's[16] thematic approaches and was undertaken by two independent researchers initially. The themes were subsequently checked by an additional researcher for assurance. Exemplar quotations have been reported although the designation of participants has been excluded as, given the small size of this group, this may make them identifiable.

Following the first survey (round one), the responses were reviewed, and it was identified that overall, in eight out of ten of the questions agreement between participants had exceeded the level of agreement established by the researchers. As a result, the decision by the research was made unanimously, to cease the surveys and analyse the results in full as a single round.

Results

Responses were received from 51 individuals; the majority were based in England although there were also representatives from Wales and Northern Ireland (Supplementary materials Table 1). The demographics confirmed the sample were predominantly white females between 30 and 50 years of age, likely reflective of the professional population. A range of job titles were reported, with the majority from clinical practice, with most subspecialties represented such as clinical oncology, surgery, nursing and clinical physics. A range of practice levels responded across academia, operational and strategic management, and advanced and consultant practice (Supplementary materials Figure 1).

On reviewing the NSO training framework, most of the panel members (n=46/51; 90.2%) felt the capabilities appropriately mapped to the 2017 MPF.[7] When asked about the clarity of the framework introduction and the introduction to the CiPs an overall positive response rate was noted (n=50/51; 98%). There was a slightly lower level of consensus around the clarity of the generic and core oncology CiPs, but less agreement in the speciality-specific capabilities (Table 1). Despite the variation, all questions met the established consensus level.

Table 1. Views on the framework alignment and CiPs (n=51)

Question	Yes	No	Standard Deviation
The curriculum framework aligns with the HEE Multi-professional framework for advanced clinical practice in England	n=46 (90.2%)	n=5 (9.8%)	0.297
Does the introduction to this section provide clarity on what a capability in practice is and how they are to be used?	n=50 (98%).	n=1 (2%)	0.139
Do the generic capabilities in practice demonstrate the required knowledge, skills and behaviours expected of a practitioner working in non-surgical oncology at an advanced level?	n=46 (90%)	n= 5 (10%)	0.297
Do the core oncology capabilities in practice demonstrate the required knowledge, skills and behaviours expected of a practitioner working in non-surgical oncology at an advanced level?	n=41 (80.4%)	n= 10 (19.6%)	0.397
Do the site and speciality-specific capabilities in practice demonstrate the required knowledge, skills and behaviours expected of a practitioner working in non-surgical oncology at an advanced level?	n=36 (70.6%)	n= 15 (29%)	0.456

Other closed questions considered the participant's views on workplace supervision (applying the NHS England minimum standards)[17] and assessment arrangements recommended within the training framework (Table 2). Most participants agreed that the supervision expectations were appropriate (n=30/51; 58.8%), although six participants commented that supervision is required but had concerns over implementation.

"Can be challenging but if organised it can be achieved." (P16)

Table 2. Views on the training, supervision and assessment elements of the framework (n=51)

Question	Yes	No	Not sure/blank
The suggested evidence to demonstrate the Capabilities in Practice (CiPs) are appropriate	n=43 (84.3%)	n=8 (15.7%)	0
Expected progression through training [throughout the three years] is realistic and achievable	n=44 (86.2%)	n=5 (9.8%)	n=2 (3.9%)
Is the work-based training time realistic to implement in clinical practice?	n=42 (82.4%)	n=7 (13.7%)	n=2 (3.9%)
Is it clear who can sign off the CiPs of trainee advanced practitioners?	n=37 (72.5%)	n=12 (23.5%)	n=2 (3.9%)
Is the evidence suggested appropriate to the CiPs?	n=41 (80.4%)	n=8 (15.7%)	n=2 (3.9%)
Will the training framework provide reassurance that advanced practitioners in non-surgical oncology have the appropriate knowledge and skills to work at this level and provide high-quality, safe, effective care to patients?	n=41 (80.4%)	n=8 (15.7%)	n=2 (3.9%)

Qualitative responses

The survey elicited a range of free text comments related to the framework and wider advanced practice agenda. Five discrete themes were identified:

- Understanding of how to use the training framework
- Supervision and support
- Understanding of Advanced Practice.
- Other professions and specialisms
- Supporting historical practitioners

Overall, there were concerns that the working group had not mapped the training framework to the Aspirant Cancer Career and Education Development (ACCEND) Framework.[18] However, it should be highlighted, that ACCEND[18] was not published at the time of development of the training framework. However, to minimise risk to the development of the NSO training framework, members of the working group were also workstream members of ACCEND,[18] with plans to map against all relevant policies and frameworks for the definitive version.

There was a positive response to the wider NSO training framework with specific

responses to the separate sections.

> *"Standardisation across the professions all working under the same* curriculum *[NSO training framework] will give reassurance to patients and professionals. It should also ensure national support for roles and Trust/workforce development." (P10)*

However, it was felt that the NSO training framework was too long, which in turn could affect implementation.

> *"The whole document is too wordy and requires some flow charts and fast links." (P47)*

Also, clarity in identifying the overall aim of the NSO Training Framework was sought.

> *"It feels at times as though it has an identity crisis. What is it trying to be? A credential by the CfAP definition as a unit of learning for an HEI to build a programme on? an employer and practitioner whole training programme, curriculum, and training frameworks? An employer's governance and assurance framework. Some brilliant content but is it all in the right document and should it all be in this one single document?" (P25)*

<u>Understanding of how to use the NSO training framework</u>

The section introducing the CiPs and how they should be applied to the tACP/AP was understood by most participants.

> *"It is clear that CiP's underpin the training, and that all practitioners who undertake the training will be trained to the same standard regardless of professional background." (P31)*

The generic and the core oncology CiPs were seen positively as they supported the underpinning knowledge in providing effective care to the patient.

> *"Having knowledge of the system as a whole is vital at the advanced level as patients will move through the system as a whole, they expect excellent communication between staff groups and a high level of knowledge from all practitioners. I have counselled many patients who become distressed if a healthcare professional has given them incorrect information that is not individualised. Generic capabilities should at least reduce this unconscious incompetence." (P31)*

> *"There is clear clarity and expectation of the required development of these [specific CiP] areas." (P32)*

However, there was a lack of understanding of how the CiPs could be applied and assessed in practice and the level of responsibility that would be expected upon completion of training.

"Clarity could be improved here though. An overview of the CiPs and the general descriptors of how these are represented and make up the whole credential would be useful." (P25)

Supervision and support

In addition to the closed questions around supervision expectations, additional free-text responses were provided. Considering the supervisor role, the participants had a positive understanding of identifying the needs of the trainee and their responsibility for patient safety. They also identified that the supervisor would be an *expert* in providing *support*, *feedback* and *mentorship* whilst *facilitating* learning and undertaking *assessments.*

"Different models of supervision can be used to support the practitioner to develop capability across the pillars. Must be educational, normative, supportive, and reflective. Also practice-theory assimilation and supports the practitioner to self-actualise." (P27)

Consideration of the supervisor role and how experienced advanced and consultant practitioners could provide supervision was considered in addition to the medical staff.

"Strong alignment to a medical training model without acknowledgement and recognition that multi-professional supervision is and should be different taking strengths from the medical training model." (P25)

Participants also emphasised the challenges in accessing appropriate supervision, the supervisor requirements and accurate job planning in an already stretched workforce, highlighting the need for dedicated time and resources.

"May help to include reference to job plans of consultants to showcase that they also have allotted protected time (these roles are not asking for anything different that their peers once they are fully qualified)." (P39)

Some comments highlighted the issues around differences in supervision between medical staff and the wider multi-professional team.

"Considered that if no ACPs are working within speciality workplace supervision may be undertaken with medical model and medics. Responsibilities are also very different and therefore may be a disconnect with supervision from medics and non-medical ANPs [Advanced Nurse practitioner]."(P29)

The role of academia was also highlighted in terms of defining the supervisor role.

"More clarity needed regarding role of supervision vs mentoring from both clinical and academic perspective – clarity on who is supporting the trainee (not just overseeing)." (P50)

But also, the importance of academic expertise to support educational delivery was recognised.

> *"There should be more reference to the knowledge and skills of the academic workforce required to deliver the key master's awards". (P46)*

Additionally, there was also concern around alignment with other guidance across the multi-professional space.

> *"Terminology [is] not clear it [is] very different to NMC supervision and practice and standard for prescribing supervision and practice. needs to be mapped to other professions re terminology". (P43)*

Understanding of Advanced Practice.

A theme highlighted throughout the data showed the continual lack of understanding of the advanced level of practice, particularly where current roles may not align with the expectations of the framework.

> *"The generic capabilities are expecting more than the current advanced practitioner scope of practice, terminology is confusing and does not differentiate this advanced clinical practice role." (P7)*

> *"These exceed the current role. Advanced radiotherapy practitioners do not routinely prescribe therapies or make clinical decisions." (P8)*

This was also reflected in the lack of understanding of the explicit need to work across the four pillars of practice.

> *"I think this section explicitly details the knowledge; skills & behaviours required at AP level. Whilst research is important and provides evidence to develop future practice, in busy departments there isn't the luxury to spend time coming up with & executing research projects. I would therefore question whether this should be compulsory." (P22)*

Further consideration of the 'generalist' versus the 'specialist' advanced practitioner role was also highlighted.

> *"This framework will provide employers with clarity that trainees are following a standardised accredited pathway that ensures adequate training needs are met." (P51)*

Other professions and specialisms

The responses also suggested missed opportunities to include other professional groups and specialisms in the NSO Training Framework. This mainly referred to the missed opportunity for non-statutory regulated professions to implement the NSO training framework and further career development in advanced practice.

> *"Page 7 [states] requires staff to be registered. it is common for Technologists/Dosimetrists to not be registered, as there is no national formal*

register. There is an IPEM voluntary register. The definition should be adapted to include voluntary registration." (P28)

"While accepting the case of dosimetrists is complex because of the range of entry routes and there is no mandatory requirement for registration, (which) should not be a reason for leaving this staff group behind. All staff in non-surgical oncology roles have the right to career progression. Amongst radiotherapy physics staff, Clinical Scientists get the opportunity to develop their careers but dosimetrists – whether clinical technologists or therapeutic radiographers by background – do not yet have a structure in place to advance." (P48)

In addition to professional groups, there were also other specialisms highlighted for potential inclusion.

"No mention of haematology as a speciality - is this covered in a different document?" (P51)

"I wonder whether you would consider acknowledging paediatric and TYA [teenage and young adult] patients as a speciality, although they are a minority population they have very specific and specialised care and there are Specialist Therapeutic radiographers who I know work at a high level providing advanced care who would welcome this document and the support of the framework for their role and recognition." (P10)

<u>Support for historical practitioners.</u>

Naturally, there was concern highlighted for those who have been in post for some time and are working at an advanced practice level.

"The document focuses primarily on those embarking on this journey from the outset. Although it alludes to some already commencing master's level learning/working at a high level that has previously not been recognised, there is little guidance for how this pathway may look". (P51)

The lack of recognition of roles was identified as an area of concern for experienced practitioners already in advanced roles. This was particularly acknowledged to impact those who have achieved their role through equivalence and the potential impact on incentives to progress in practice.

"Potentially those already working in similar advanced roles but without the MSc may feel daunted by the process to 'keep their job'." (P10)

"Cost, staff already doing job with no masters, No incentive to complete study, no time to release staff from clinic to go to Uni, No workforce planning happening, staff burn out, 8a banding and top 7 banding the same (£50 more) for 5 years cannot get staff interested in 8a posts as they have to stay a 7 now till all this completed. Many are already NMP and have been working as ACPs without the masters for a decade" (P47)

Final revision of the framework

Following the survey and confirmation of agreement over the content, language and positioning within the oncology specialty minor amendments to the framework were made by the working group to address the comments.

The definitive version will then be reviewed by a patient and public group for review, before being submitted to the professional bodies and NHS England for publication.

Discussion

The development of the NSO training framework has sought to ensure a high standard of education and training for trainees regardless of setting, professional background or education provider. A Delphi technique was considered appropriate given the range of stakeholders across the UK, other approaches to build consensus could include an expert panel, a face-to-face consensus conference and nominal group techniques[19] although these were discounted in the development stage. As such the development has been inclusive and subject to iterative changes. The national consultation process has been of paramount importance with the opportunity to capture a wide range of insights to best inform the suitability and implementation of the definitive version of the training framework. Although Delphi studies usually are completed over at least two rounds the decision to halt the consultation was felt appropriate and is not unique.[20]

Overall, participants of the survey were in favour of the NSO training framework, in particular that it was user-friendly and logical in demonstrating the underpinning knowledge requirements. It is also recognised that it needs to flexibly support the trainees in enhancing their knowledge, skills and behaviours within their scope of practice, whilst aligning with the four pillars of practice. [21]

Conversely, some participants were unable to fully comprehend the content of the CiPs, particularly their assessment and assurance around the required level of responsibility. This was most apparent in the speciality CiPs, with the qualitative data confirming the need for further socialisation, perhaps influenced by participants' unfamiliarity with the terminology as the concept is relatively new to the nursing, pharmacy and AHP professions. The principles however are particularly relevant to movement from task-focused roles to the concept of capabilities at a level of practice. The use of CiPs is well established within the medical field in evidencing the individual’s knowledge, skills and attributes developing from novice to expert. As such CiPs can be both transferrable and adaptable to an advanced practice setting where the capability and level of clinical practice are clearly defined.

There was a strong consensus around the importance and need to establish a model of supervision. However, it should be noted that the guidance for supervision aligned in the framework is unique to England, when replicating this within the devolved nations, their national guidance should be embedded. Each trainee must have a dedicated and appropriately trained co-ordinating education supervisor and in addition

associate workplace supervisors for clinical practice. Supervisors should provide a continuity of support and be invested in the trainee's development.[22] Most importantly the educational supervisor plays a significant role in assuring patient safety priority ensuring clinical governance processes and adherence to the NHS constitution and professional regulatory expectations. Participants in the survey also highlighted the experience of the supervisor and their availability to support them to be critical components. Identification of a supervisor within the workplace, appropriate job planning, and time allocation are requirements on the employer in advance of the start of training.[3] Supervisors must be experts in the specific area of practice and maintain their continued professional development demonstrating up-to-date practice and being able to assess the trainee. Although supervision underpins the success of the NSO training framework it is not indicative of the consensus of the content. This identifies the additional work required to support the implementation of supervision, which is not in isolation to this speciality but across healthcare.[22]

A lack of understanding of the concept of advanced-level practice was evidenced in the survey responses. The clarity of roles remains an issue which is acknowledged in similar studies where a common concern among stakeholders was the lack of standardisation with limited role clarity.[6,23] This is exacerbated by the inconsistency of job titles that hinders the recognition and acceptance of the advanced level in practice. Equally, the issues appear to be compounded by misunderstandings around clinical skills and non-medical prescribing requirements which are not relevant to some professionals working at an advanced practice level.[21]

Participants did highlight the possibility of including other professional groups within the framework, specifically referencing clinical technologists and dosimetrists. Such roles have relevant skill sets within the NSO pathway through involvement in treatment planning, quality assurance and preparation of patient-specific immobilisation devices. However, the non-regulated status of the professions impacts the development of individuals and the wider profession. The modern NHS requires an update on regulatory requirements to enable these professional groups and unlock opportunities to advance the role.[24]

Finally, the survey highlighted some anxiety from current practitioners in legacy roles and the potential impact of the framework. Specifically, participants cited a lack of guidance on their progress, a lack of recognition and a lack of incentive to study with no perceivable benefits. This indicates that current practitioners want the opportunity to validate their knowledge and experience, to gain appropriate recognition. Snaith et al [25] demonstrate that such a route exists to mitigate such anxieties, at least within England. The NHSE ePortfolio (supported route) is designed to recognise experienced individuals with non-accredited master's level study or whose education has been partly, or in rare cases, underpinned by experiential learning. This route is however only available to those already working at, or beyond, the advanced practice level, and cannot be used as a development route or training path. Importantly, currently, no such approach is available in the devolved nations.

Study Limitations

Some limitations of this study should be further considered. The methodological approach sought to seek consensus across a wide speciality area, however, due to the self-directed nature of gaining the sample size no specific exclusion criteria could be applied. However, the validity of this was increased by the recording of titles and experiences of the participants showing the appropriateness of those involved. Despite multiple invitations, not all geographical regions have been represented in this study. Since the framework aligns with NHS England documentation it may have been considered inappropriate for the other countries to comment, even though there is the potential for alignment with their systems.

After one round of data collection consensus was met across the contents of the NSO training framework, meeting the threshold set by the inclusive working party of 70%. The threshold is slightly lower than those reported in other papers,[12] but due to the complexity of the speciality, with numerous professions and sub-specialities, adjustments were made to lower the consensus slightly but still show significance. It was therefore considered that a second round would not add anything meaningful to the framework and so a decision to cease data collection was agreed upon, aligning with the methodology of a modified Delphi.[20]

Conclusion

This paper has provided significant insights into the development and implementation of a standardised training framework for multi-professional advanced practice in NSO. Addressing the projected workforce shortages in oncologists and other key NSO roles, this study contributes a framework adapted from established curricula, ensuring an equitable and high-standard educational pathway for trainees. It is expected that this training framework will be embedded into accredited specialist masters ACP programmes. The multi-phase process revealed consensus for the framework's alignment with clinical and educational standards, particularly its focus on CiPs. Although highlighted inconsistencies in supervision and assessment were apparent, however, do not impact the content of the framework, and should be considered in the context of the country in which the framework is to be implemented.

Future efforts will focus on refining the framework and integrating feedback from patients and carers. In parallel, ensuring alignment with evolving policies, such as the ACCEND framework,[18] will enhance its applicability and longevity. The final steps for the definitive version are the final sign-off from professional bodies and endorsement and publication by NHS England.

This paper lays the groundwork for further research into innovative workforce development strategies, calling for ongoing collaborative efforts across healthcare sectors to adapt and evolve in response to complex clinical and organisational demands. The framework continues to work towards its aims to improve service delivery, patient outcomes, and workforce sustainability.

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