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**Embedding consultant radiographer roles within radiology departments: A framework for success**

J Nightingale; M Hardy; B Snaith

**Abstract**

**Objectives:** Many organisations struggle to clearly differentiate the radiographer consultant role from advanced or specialist practice, with newly appointed consultant practitioners often ill-prepared for working at this level. This article discusses the design, implementation and validation of an outcomes framework for benchmarking competencies for trainee or new-in-post consultant radiographers.

**Methods:** Five experienced radiographers from different clinical specialisms were seconded to a twelve month consultant trainee post, guided by a locally-devised outcomes framework. A longitudinal qualitative study explored, from the radiographers' perspective, the impact of the outcomes framework on the transition to consultant practice and beyond. Data collection included semi-structured interviews (months 1, 6 and 12), validation via a focus group (month 18) and a group interview (5 years).

**Results:** Early interactions with framework objectives were mechanistic, but as participants better understood the role more creative approaches emerged. Despite diverse clinical expertise, the framework facilitated parity between participants, promoting transparency and credibility which was important in how the consultant role was perceived. All participants achieved all framework outcomes and were subsequently appointed to substantive consultant radiographer positions.

**Conclusion** This outcomes framework facilitates experienced radiographers to successfully transition into consultant radiographers, enabling them to meet multiple non-clinical targets while continuing to work effectively within a changing clinical environment. It is the first validated benchmarking tool designed to support the transition to radiographer consultant practice. Adoption of the tool will provide a standardised measure of consultant radiographer outcomes that will promote inter-organisational transferability hitherto unseen in the UK.

## Introduction

Allied health and nurse consultant practitioner roles were established in the UK nearly two decades ago, [1,2] yet despite a strong political and professional desire to progress non-medical consultant practice, these roles have been adopted cautiously. With regard to radiography (diagnostic and therapeutic), there were 133 consultant practitioners in post in March 2018[3] compared to the 32,167 radiographers registered with the regulatory body (Health and Care Professions Council (HCPC).[4] While acknowledging that not all registered radiographers will be currently in practice in the UK, this nevertheless equates to approximately 0.4% of the registered profession. A reported cause of the limited adoption of non-medical consultant practitioner roles has been the difficulty experienced by organisations to clearly define and differentiate the consultant role from advanced or specialist practice[5,6] and in turn, clarify role expectations in terms of measures of success.[7-9] As a result, the lack of role clarity has, until recently, inhibited the production of detailed standardised role descriptors to guide and enable the introduction of consultant radiographer posts within clinical departments.[10-14]

While the four domains of non-medical consultant practice are clearly specified[2,15,16] as (1) expert clinical practice, 2) professional leadership, 3) practice and service development, research and evaluation, and 4) education and professional development, the time awarded to activities within each domain, with the exception of expert clinical practice (50% of time) is flexible.[17] Interestingly, while early studies of consultant nurses demonstrated an insufficient focus on clinical practice,[13,18] the converse appears to be true for consultant radiographers with appointees spending a disproportionate amount of time undertaking expert clinical practice (70%[19] to 90%[20,21]) at the expense of the other three domains. While Forsyth & Maehle (2010) rightly congratulated the first generation of consultant radiographers for their commitment to developing clinical practice,[22] the persistent reliance on expert clinical skills alone suggests a lack of comprehension of the criteria needed to make these posts a success,[23] supporting the belief that organisations struggle to define and clarify the non-medical consultant role. This is further evidenced when consultant job plans are evaluated against the four domains of practice with the key components of research,[8,19,22,24-26] strategic influence[24] and leadership,[22,27] often being neglected. A focus on expert clinical practice alone will potentially limit impact of the role, and limited evidence of impact, often confined to local case studies with limited methodological rigour, has been cited in nursing literature as a potential barrier to future growth of consultant practice.[28,29] The Society and College of Radiographers (SCoR) has recently issued guidance to support the development of consultant job plans which advise upon the appropriate proportions of clinical and non-clinical sessions to facilitate working across the four domains of practice. [30]

Further criticism of the non-medical career framework has highlighted that newly appointed consultant practitioners are often ill-prepared for working at this level. This suggests that a lack of suitable development may be responsible for the poor recruitment of consultant practitioners to date,[9-11,23,31] although the introduction of the Multi-professional Framework for Advanced Clinical Practice in England (2017)[32] may address this going forwards. The transition from advanced to consultant practice is a challenging and emotional journey representing a significant life event rather than a simple job promotion.[15] Consultant practitioners are often 'launched' into their new role without consideration of this transitional period. [11,33] As a consequence of a lack of role clarity and measures of success they receive little support from employers to assess and develop threshold competencies. This article reports upon the design, implementation and validation of a generic framework for benchmarking competencies for new-in-post consultant radiographers, or those in trainee positions, across the four domains of consultant practice. Developed within an acute NHS Trust in the North of England over a five year period, it has been used to successfully guide the development and appointment of five consultant radiographers within a single NHS Trust which remains the largest employer of consultant radiographers to date. [34]

**Method**

Five experienced radiographers working within different clinical specialisms were seconded to a twelve month consultant trainee post as part of a locally devised career development programme. With two consultant radiographers already in post, the host organisation had a good awareness of the potential challenges that the trainees may face and also the opportunities that enlarging the consultant radiographer cohort might provide for service improvement and leadership. To provide clarity around expected knowledge, skills and behaviours appropriate to consultant practice and measures of role success and achievement, an outcomes framework was devised and mapped to the four domains of consultant practice alongside estimated timescales for achievement (see Figure 1).

A five-year longitudinal qualitative research study, sensitive to the traditions of phenomenology,[35] was undertaken to explore the experiences of the trainees from recruitment through their consultant transition journey. While the early consultant transition period has been previously reported,[15,36] this research considers the impact of the outcomes framework on the development of the trainees, focussing upon its perceived value to the participants on retrospective reflection and review after becoming established in post.

To preserve objectivity, this evaluation was undertaken by individuals experienced in advanced and consultant practice education and research but employed outside the study centre. Data collection

and analysis was undertaken at intervals throughout a five-year period by a researcher who was not known initially to the participants. The project was considered by the organisation to be a Service Evaluation project[37] and therefore did not require formal ethical approval, however all participants provided informed consent for their inclusion in this project at each stage of data collection.

Figure 1: Outcomes Framework (Version 1): Initial Generic Expectations for Trainee Consultant Practitioner

| **Expectations (*Domain*)** | **Objectives** | **Timeframes (by month)** |
|---|---|---|
| Identification of learning and development needs<br>*(All pillars of consultant practice)* | Gap analysis (self) (SWOT analysis)<br>Leadership of people – $360^0$ appraisal | 1-2<br>1 & 12 |
| Peer reviewed publication<br>*(Service development, research & evaluation / Education & Professional development)* | Minimum 1 article submitted to a peer reviewed journal | 12 |
| Peer reviewed presentation<br>*(Service development, research & evaluation / Education & Professional development)* | Minimum 1 conference abstract submitted to a national peer reviewed conference | 12 |
| Leadership role (people, service)<br>*(Expert clinical practice / Professional leadership & consultancy)* | Leadership of service – Clinical pathways reviewed and redefined where appropriate and presented at relevant strategic level | 6 & 12 |
| Change management project in a defined area<br>*(Expert clinical practice / Professional leadership & consultancy)* | Successfully conclude a defined and agreed change management project | 12 |
| Academic partnership<br>*(Service development, research & evaluation / Education & Professional development)* | Identify and explore opportunities for academic partnership in terms of education and research | 6 & 12 |
| MSc completion<br>(*Education & Professional development*) | Complete full MSc (including dissertation) | 12 |
| Training needs analysis and workforce development plan<br>*(Expert clinical practice / Professional leadership & consultancy)* | 5 year workforce plan with training needs (staff): internal/external education, impact, cost/benefit, succession planning | 6 & 12 |
| Promote and initiate audit programme for clinical area<br>*(Service development, research & evaluation / Professional leadership & consultancy)* | Successful audit programme initiated (3 audits within timescale presented) | 12 |
| Service representation internally within Trust<br>(*Professional leadership & consultancy)* | Membership of relevant groups within Trust | 12 |
| MDT involvement<br>*(Expert clinical practice)* | Contribution to relevant MDT | 12 |
| Substantive consultant proposal (draft 6 months)<br>*(Professional leadership & consultancy)* | Approved consultant proposal (Strategic level) | 6 & 12 |
| Exploration of funding for substantive post<br>*(Professional leadership & consultancy)* | Cost saving / income generation for substantive post funding identified | 12 |

The project consisted of three work streams (Figure 2): framework development; user feedback; and review of outcomes. The user feedback and outcome review were undertaken within several data collection episodes over the five year period (Figure 3) which commenced with individual semi-structured interviews (months 1, 6 and 12 ), each lasting approximately 45 minutes. These interviews were timed to coincide with early, mid-point and end-point engagement with the framework tool, which allowed 12 months for completion of all objectives.

Figure 2: Longitudinal Study Design – parallel work streams

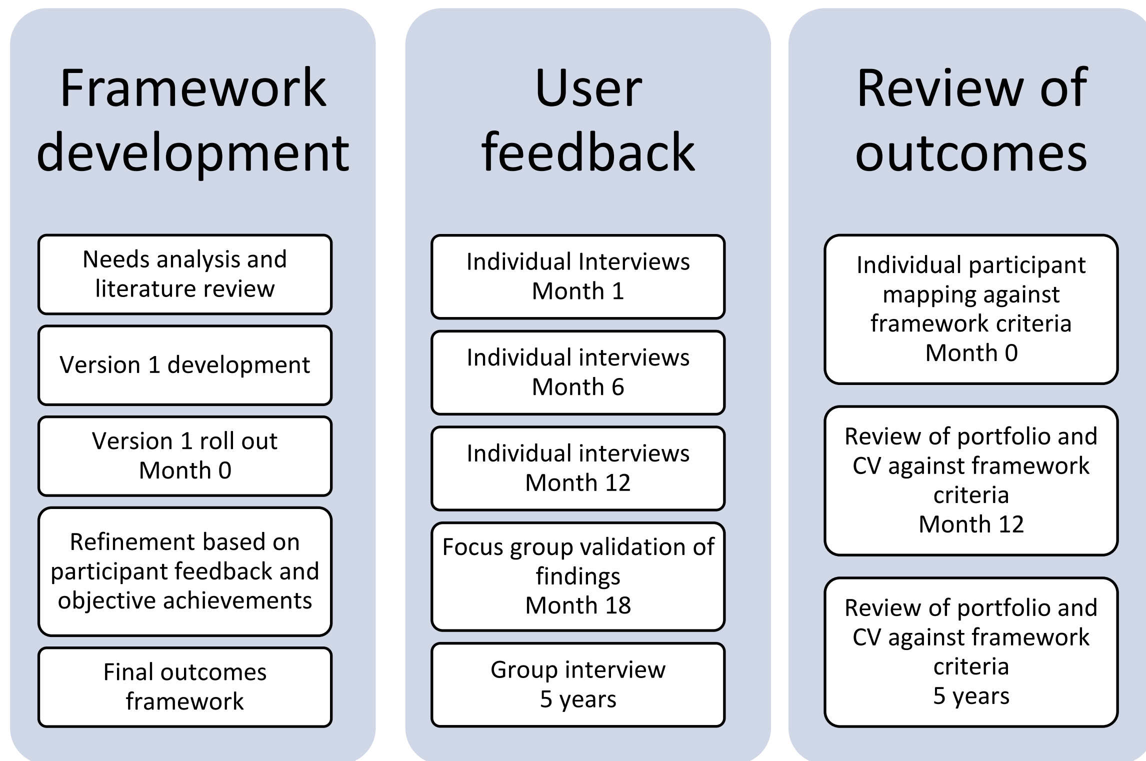
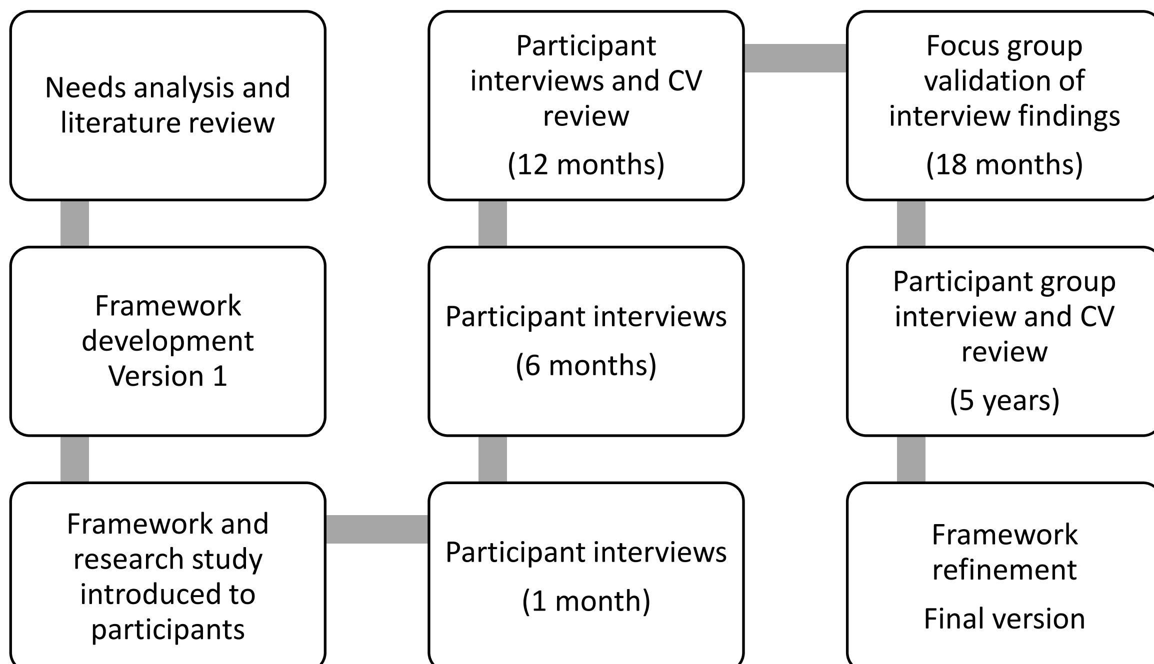



Figure 3: Longitudinal study design: data collection opportunities 0-5 years



Following analysis of the individual transcripts, a focus group was undertaken at 18 months to share with the five participants the emerging findings, and facilitate validation and shaping of these researcher findings via direct participant involvement. The researchers presented the key research findings to the participants, followed by a discussion following a pre-prepared focus group schedule. The feedback from the participants allowed exploration of potential points of interest or contention and added greater depth of understanding of the findings.

At 5 years post commencement on the trainee programme, a group interview following a pre-prepared interview schedule was used to facilitate a retrospective review of the framework from the point of view of the now experienced consultant practitioners. All interviews were analysed via a thematic analysis process and a detailed overview of data collection and analysis has been published.[15]

**Results**

The outcomes framework was introduced to the five trainee consultant radiographers at month 0 (zero). All participants converted the 'generic' framework expectations into an individual action plan based upon an initial gap analysis of their actual versus desired performance, alongside self-reflection and appraisal objectives. The interviews explored the participants' perceptions of progress towards achievement of the framework objectives recording what aspects of development they were comfortable with and which, if any, created anxiety. Participant responses were triangulated with documentary evidence of progress and self-evaluation including the mapping of Curriculum Vitae (CVs) and development portfolios against the framework criteria.

*Initial Interviews (Month 1)*

The early interviews explored the participant's career to date and reviewed their gap analysis. This self-evaluation of development needs was informed by personal (Myers-Briggs Type Indicator®)[38] and peer assessment (NHS $360^0$)[39] profiling exercises. At this stage, all trainees felt comfortable with their expert clinical skills and with their education related goals, but expressed concern regarding their perceived lack of externality to the organisation and their leadership capability, even though some had significant managerial experience.

*Mid-point Interviews (Month 6)*

At this stage in their development journey, participants lacked self-belief and confidence in their ability to achieve the framework outcomes although evidence of progress was apparent upon reflection during interviews. Participant focus was predominantly on operational tasks or the 'quick wins' within the outcomes framework rather than the more strategic or harder to implement activities. Engagement with healthcare practitioners beyond their discipline and evidence of multi-professional or external collaboration was lacking and while all reported being comfortable with progress towards educational, research and dissemination outcomes, engagement with these activities was superficial.

*Final Interviews (Month 12)*

Participant confidence had returned by this stage in terms of leadership, facilitating staff development, and driving forwards clinical audit and service evaluation, identifying improvement opportunities as a result of local health service reconfiguration. All participants felt that after the twelve month development period they had made good progress, and they appreciated that the framework objectives had kept them on target:

> *"I think it was good we had goals set as it would be easy to just drift."*
>
> *Participant C, Final Interview*

They reported that rather than viewing the framework outcomes as necessary hurdles, or as a bureaucratic box ticking exercise, they had consolidated many of these activities into their normal working practices. They were no longer approaching the framework objectives as silo activities but were instead merging the framework expectations within more ambitious inter-related projects and activities.

*Focus Group - Validation of Interview Findings (18 months)*

The researchers presented their analysis of the individual interview findings to the participants within a focus group. This enabled validation of findings by giving the participants an opportunity to agree, expand upon or refute the researchers' interpretations of their trainee consultant experiences over the first 18 months. Overall the participants had a positive view on the value of the outcomes framework in guiding their transition to consultant radiographer, reflecting that the framework provided the time and structure for them, and their department, to better understand the consultant role:

*"I don't think I would be where I am now if I hadn't had the process [framework & development period] … it gave me breathing space to get that confidence..."*

*Participant E, Focus Group Interview*

*"I think the whole process has done what it was set out to do..."*

*Participant B, Focus Group Interview*

However, at this stage, while participants appreciated the framework structure in guiding development, they were also beginning to critically reflect on the framework construct.

"*I think that targets were very good at focussing you as to what your role should involve…"*

*Participant C, Focus Group Interview*

*"It's [the framework] quite a thorough plan really …yes"*

*Participant D, Focus Group Interview*

*"Whether the objectives were right is a different thing, but we needed the objectives."*

*Participant A, Focus Group Interview*

Participants discussed extensively the difficulties in achieving some framework outcomes within the 12 month window, specifically those related to undertaking a change management project, publishing and research. They were surprised at the omission of an objective related to completion of a research project, noting that the objectives were more focussed to dissemination than to research. However they all identified opportunities to disseminate their MSc dissertation findings, recognising that opportunities for publication and dissemination extend beyond research. On reflection, they considered that a research target might be more appropriate within a 5 year role plan rather than within the initial framework.

*Group Interview – Retrospective review of framework (5 years)*

All participants had met all framework outcomes and had worked closely with the radiology senior leadership team to present a viable consultant job plan to the host organisation. All had been appointed to a substantive consultant radiographer position within the host Trust. Reflecting on their development period and the role of the outcomes framework in guiding their development, they reported that the framework encouraged parity between them, despite diverse clinical

expertise, as it was based on generic expectations that they were able to individualise based on their gap analysis and clinical specialism.

> *"We all had different strengths depending on where our backgrounds were, but it levelled us all out didn't it? To the same place."*
>
> *Participant B, 5 Year Group Interview*

They acknowledged that while the development period was challenging and stressful, the outcomes framework provided success criteria for benchmarking and transparency, an important factor for both how participants viewed themselves, but also how they felt they, and their role, was being perceived by others.

> *"...I felt like it gave us credibility...people felt like we'd gone through a process...we weren't just given the job."*
>
> *Participant B, 5 Year Group Interview*

> *"I think it made it a more open process for those outside looking in…"*
>
> *Participant C, 5 Year Group Interview*

The participants acknowledged that as the outcomes framework had been informed by the four domains of consultant practice, it pushed them into achieving competencies across the full consultant role. Successful completion of the outcomes occurred by 18 months, and this coincided with the introduction of the Society and College of Radiographers consultant accreditation scheme.[41] The participants were asked by their employer to apply for this accreditation. While they recognised that they had accrued ample evidence during the secondment to prepare an application, they identified that the application process was time-consuming and they did not feel at the time that there was any significant benefit for them:

> *"I think the College's idea was that if it came to it that you were having to justify your role it would give you ammunition to prove that you were working at that level, but we actually don't have that issue. So I do think we felt it was just a bit of a …tick the box exercise."*
>
> *Participant D, 5 year Group Interview*

At both the 18 month and 5 year reviews the participants discussed the high workload and steep learning curve required to conclude the framework outcomes, and they argued that in order to develop into a consultant practitioner, evidence of achievement of expert clinical practice should be a pre-requisite.

*"…you're already considered a clinical expert, and this is just to help get the other bits that you need …"*

*Participant D, Focus Group Interview*

*"I'd like to think that this is sold with the expectation that the clinical expertise is a 'given' … an employment prerequisite"*

*Participant E, Focus Group Interview*

Nevertheless, drawing upon their greater experience at the five year review, there was debate regarding what constituted clinical expertise, including consideration of length and breadth of experience, post-registration qualifications, clinical leadership and peer recognition. There was also a realisation that a trainee consultant radiographer could be appointed from a recent managerial or academic background which would require clinical skills development, although the group felt this would necessitate the updating of, rather than developing new skills. The group concluded that as well as clinical expertise, pre-requisites should include evidence of development towards the other three domains of consultant practice.

One of the benefits of the outcomes framework reflected in hindsight was the focus it created to meet multiple non-clinical targets and deadlines while participants continued to work at a high level within a changing clinical environment. Participants felt this prepared them for the diversity of role expectations and competing pressures as a consultant radiographer. As a result, all participants felt that the framework expectations were valid and achievable as part of a consultant radiographers development programme but not within a 12 month timeframe. A further interesting finding that the now experienced consultant practitioners noted was that the research design process used to evaluate the framework (interviews and progress mapping) had inadvertently been beneficial in their personal development.

*"Doing what you guys did [the researchers]…made me get to the stage I am – reflecting on what I did and thinking about what I was doing at that stage and have I completed everything, this made me get to the stage that I am. I think if you were going to sell this as a model, you'd have to put something like that in …"*

*Participant A, Focus Group Interview*

Summarising user feedback, participants felt that the outcomes framework was a valid tool for both a 'trainee' and a more experienced consultant radiographer requiring development across the four domains of practice. However, it was felt that the original 12 month timeframe required modification

and that some outcomes should be a pre-requisite for initial appointment. Finally, participants felt that the framework would also have value in departmental succession planning.

> *"...we can see a process for bringing somebody on...that those are the things that that person needs."*
>
> *Participant C, 5 Year Group Interview*

**Framework Revision**

Based upon participant feedback, the outcomes framework was revised to incorporate longer timeframes and change some criteria into pre-requisites for consultant practitioner development (Figure 4). Specifically, participants felt that evidence of contribution to all four domains of practice, documented confirmation of clinical expertise as determined through peer evaluation or practice audit, and completion of a full Masters award should be mandatory pre-requisites.

Outcomes related to research and dissemination were also amended in the revised framework to better reflect the developmental stages within these objectives, encouraging a staged approach to participant progress. As completion of a full Master's award was defined as mandatory for commencing consultant development, a further objective was added relating to developing a detailed research proposal and completion of ethical approval process, both considered to be key learning opportunities to support consultant radiographers to become clinical research leaders. Completion of a research project was, however, considered to extend beyond the developmental phase for consultant practice due to the inherent lengthy timescales for seeking ethical approval and for data collection and analysis.

Additionally, in the event of the framework being used by a new in post consultant, where the substantive post already exists, the requirement to prepare a business proposal for a substantive post is redundant, and has been replaced by an objective related to submission for professional body accreditation as a Consultant Radiographer.

The design and presentation of the framework was also amended to facilitate participants and organisations to evaluate and record participant progress towards expected outcomes and discuss any developmental intervention or support required to enable success. Participants also felt that identifying the focus of the development would enable them to better evidence and articulate the wider contribution and multi-faceted nature of the consultant role, allowing clarity of expectations beyond expert clinical practice.

Figure 4: Final outcomes framework for trainee or new in post consultant practitioner

| | Expectations | Outcomes | Development Focus | Timeframes (by month) | Rating (circle) |
|---|---|---|---|---|---|
| 1 | Pre-requisite 1 | Complete MSc including dissertation component | | | Completed |
| 2 | Pre-requisite 2 | Evidence of high level clinical expertise in specialist area, including audit outcomes and peer assessment | | | Completed |
| 3 | Pre-requisite 3 | Evidence of 'entry level' involvement and engagement across all 4 domains | | | Completed |
| 4 | Identification of learning and development needs | Gap analysis (self) which may include: SWOT analysis; NHS $360^0$ appraisal; Myers Briggs inventory | Individual<br>Patient Facing<br>Organisational<br>Professional | 1 & 12 | Exceeded<br>Achieved<br>Developing |
| 5 | Mentorship and coaching | Identification of internal mentor to provide support through programme | Individual<br>Patient Facing<br>Organisational<br>Professional | 1 | Exceeded<br>Achieved<br>Developing |
| 6 | Mentorship and coaching | Identification of external mentor / coaches | Individual<br>Patient Facing<br>Organisational<br>Professional | 3 | Exceeded<br>Achieved<br>Developing |
| 7 | Dissemination & publication | 1 submission to a professional journal or magazine (CPD article, letter, information piece) | Individual<br>Patient Facing<br>Organisational<br>Professional | 6 | Exceeded<br>Achieved<br>Developing |
| 8 | Dissemination & publication | 1 article submitted to a peer reviewed journal | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |
| 9 | Dissemination & publication | 1 presentation at a study day or CPD event (internal or external to the organisation) | Individual<br>Patient Facing<br>Organisational<br>Professional | 12 | Exceeded<br>Achieved<br>Developing |
| 10 | Dissemination & publication | 1 conference abstract submitted to a national peer reviewed conference | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |
| 11 | Leadership of service | Minimum of 2 clinical pathways reviewed and redefined where appropriate and presented for consideration at relevant strategic level. | Individual<br>Patient Facing<br>Organisational<br>Professional | 6 & 12 | Exceeded<br>Achieved<br>Developing |
| 12 | Change management project | Successfully conclude a defined and agreed change management project of appropriate size/complexity | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |
| 13 | Academic engagement | Undertake 'guest lectures' for an external educational organisation | Individual<br>Patient Facing<br>Organisational<br>Professional | 12 | Exceeded<br>Achieved<br>Developing |
| 14 | Academic partnership | Identify, explore and develop opportunities for academic partnership in terms of education and research | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |

| 15 | Research | Develop a detailed research proposal relevant to your specialist practice area, in collaboration with clinical and academic colleagues where appropriate, and obtain ethical/research approval for commencement. | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |
|---|---|---|---|---|---|
| 16 | Training needs analysis and workforce development plan | Present a 5 year workforce plan with staff training needs in own specialism. To include: internal/external education; impact; cost/benefit analysis; growth and succession planning. | Individual<br>Patient Facing<br>Organisational<br>Professional | 12 | Exceeded<br>Achieved<br>Developing |
| 17 | Promote and initiate audit programme for specialist clinical area | Scope and define a 3 year cycle for audits in own area of practice | Individual<br>Patient Facing<br>Organisational<br>Professional | 3 | Exceeded<br>Achieved<br>Developing |
| 18 | Promote and initiate audit programme for specialist clinical area | Conduct or initiate 3 audits of practice within timescale presented | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |
| 19 | Service representation internally within organisation | Membership of at least 2 relevant groups or committees within employing organisation including (preferably) 1 outside clinical department. | Individual<br>Patient Facing<br>Organisational<br>Professional | 12 | Exceeded<br>Achieved<br>Developing |
| 20 | Service representation internally within organisation | Membership/contribution to at least 1 relevant MDT meeting | Individual<br>Patient Facing<br>Organisational<br>Professional | 12 | Exceeded<br>Achieved<br>Developing |
| 21 | Business case for substantive cons post, and / or Consultant Accreditation | Develop and submit a business case for a substantive consultant post including exploration of funding implications (costs/savings and potential income generation opportunities). Where a substantive post already exists (e.g. new in post consultants) then achievement of professional body accreditation as a Consultant Radiographer is required. | Individual<br>Patient Facing<br>Organisational<br>Professional | 18 | Exceeded<br>Achieved<br>Developing |

**Discussion**

The longitudinal approach to the evaluation of consultant radiographer career transition[15,36] adopted in this study provides a unique insight into the transition journey and difficulties experienced in assimilating and evidencing the multi-faceted attributes of consultant practice. The purposefully designed outcomes framework aligns with guidance from the professional body (SCoR) for supporting new consultant roles[30] and for consultant practitioner accreditation;[41] completion of the objectives within the framework should therefore provide ample evidence for a subsequent accreditation application. Where a consultant practitioner moves into an existing substantive consultant post, we have incorporated a flexible option for achieving consultant practitioner accreditation into the framework. This will provide externality and transferability to the role, and will offer external validation of the role to the employer and the individual.

The educational pre-requisites for advanced and consultant practice remain contentious, with a 2017 guidance document from the Society and College of Radiographers[30] recommending that trainee consultants should be working towards a Master's degree during their period of training. This is contrary to the findings from this research which strongly supports the completion of the Master's

degree as a pre-requisite to a trainee consultant post or a new in post consultant, as the completion of a Master's dissertation is a significant educational undertaking. This has the potential to negatively impact on the achievement of other role-related goals, as well as increasing anxiety and stress in an already difficult transition journey as shown in our earlier published findings.[15,36] The early preparation for consultant practice across the four pillars of practice is likely to be addressed with future widespread adoption of the Multi-Professional Advanced Clinical Practice (ACP) framework [32] but this is in its early stages of implementation and it will be some time before practitioners working within the framework move through from advanced to consultant practice. It is disappointing that this ACP framework which is a continuum from advanced to consultant practice, has stopped short of requiring a Master's degree, instead referring to a minimum requirement of a Master's award (Postgraduate Certificate or Diploma). This highlights, perhaps inadvertently, that the research pillar of practice does not carry the same significance of the other pillars; an ACP practitioner does not appear within this framework to require any experience of participating in research. [32] Again this is in contrast to the framework we have presented, where we have not only required a Master's degree as a pre-requisite, but in response to participant feedback we have also incorporated the development of a research funding proposal and ethics application into the framework. Completing these tasks facilitates an understanding of research processes and exploration of and engagement in local and national research support networks, and is achievable within the allocated 18 month timeframe. We believe this move towards enhancing, rather than depleting, the experience of the research process is vital to the success of the consultant post. This is in line with the ambitions of the Society and College of Radiographers[30,40] guidance which states that by 2021 there is an expectation that consultant radiographers will hold, or be working towards, a doctoral level award. With further utilisation and feedback of our outcomes framework we will consider incorporating an additional outcome of registered for, or working towards, a Doctoral level award in future framework revisions.

The NHS Trust hosting this study has clearly embraced consultant radiographer practice with substantive consultant posts across six different clinical areas, yet this level of engagement with radiographer consultant practice is not widespread in the UK. Where consultant radiographer practice has been introduced, it has been criticised for a predominantly expert clinical practice focus at the expense of the other three domains [20,21] which raises the question regarding whether this is more akin to a specialist practice role, rather than consultant practice. Adoption of the outcomes framework (Figure 4) enabled both the host organisation and individual participants to avert any difficulties related to clearly defining the non-medical consultant role and differentiating it from advanced or specialist practice as has been previously reported in the literature.[7-9] The framework provides a standardised tool for developing appropriate job plans for trainee or newly appointed consultants, providing them with clearly defined SMART (Specific; Measurable; Achievable; Relevant;

Time-bound) outcomes to evidence higher level practice attainment. The framework has been tested in a real-world situation over a five year timeframe, applied to consultant practitioners with different pre-secondment experiences and working in a range of clinical settings. It supports transparency and equity in threshold competencies and role expectations, regardless of practice specialty, and overcomes the reported disproportionate emphasis on expert clinical practice.[19-21]

Following participant feedback, the revised framework offers a practical checklist to inform personal and professional development during the emergent to established consultant transition period. The 'at a glance' incremental framework approach can be used to inform or replace Performance Development Reviews or appraisals during the transition period, with the reassurance for both practitioners and employers that the outcomes of the framework are underpinned by, and build upon recent, relevant and complementary guidance documents including the 2017 SCoR consultant radiographer guidance [30] and the Health Education England Multi-professional ACP framework. [32]

The outcomes framework has supported workforce transformation and skills-mix integration by providing greater clarity regarding the expectations of the consultant radiographer role for both individuals and the organisation, guiding the trainees towards achievement of the required knowledge, skills and behaviours appropriate to consultant practice. Importantly, analysis of participant portfolios and progress at defined points in the pathway demonstrated a change in trainee behaviours and perspectives over time with participants moving from focussing on single objectives to greater creativity in thinking, merging several objectives within more complex and higher impact activities. This maturity in thinking was characterised by a change in perception of self, role and autonomy as the participants moved from a predominantly externally directed advanced practice role to a self-directed clinical leadership role. This gradual move from emergent to established consultant practice was facilitated by the framework which gave guidance on objectives but did not constrain the participants in how they presented evidence of achievement and impact. This enabled the participants to evidence their creativity and entrepreneurism, characteristics also noted in a study of experienced nurse practitioners.[42] However, this change in thinking, behaviour and achievement of framework objectives was often unrecognised by participants until their progress was discussed and reflected on as part of the evaluation process, therefore confirming the importance of independent mentorship during the development period. This external mentorship could extend to support not only the emergent consultant but also the established consultant, moving from a developmental framework as presented here, towards a framework focussed on the evidencing of impact of the consultant role.[29]

## Conclusion

The outcomes framework presented in this paper was developed to support advanced and specialist practice radiographers successfully transition into consultant radiographers, facilitating them to evidence the acquisition of the necessary skills, knowledge and behaviours. The framework is not specific to radiography but instead can be adapted for use across nursing and allied health professions or areas of specialist practice within them. Adoption of the tool as a standard framework will facilitate transparency and equity in threshold consultant practitioner role expectations and provide a standardised measure of role outcomes attainment that will promote inter-organisational transferability hitherto unseen in the UK.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## References


1. Department of Health. Making a difference: strengthening nursing, midwifery and health visiting contribution to health and healthcare. DoH 1999: London: HMSO 1999.
2. Department of Health. The NHS Plan: A plan for investment, a plan for reform. DoH 2000: London: HMSO, 2000.
3. Society of Radiographers. Consultant radiographer group. Available at: https://www.sor.org/career-progression/consultants/consultant-radiographer-group#Emergency Care Accessed 23rd March 2018.
4. Health and Care Professions Council. Radiographers. Available at: http://www.hcpc-uk.co.uk/aboutregistration/professions/index.asp?id=12. Accessed 19th March 2018.
5. Maylor M. Differentiating between a consultant nurse and a clinical nurse specialist. British Journal of Nursing 2005;14(8):463-8.
6. Daly WM, Carnwell R. Nursing roles and levels of practice: a framework for differentiating between elementary, specialist and advancing nursing practice. Journal of Clinical Nursing 2003;12:158-67.
7. Lathlean J. Researching the implementation of pioneering roles in nursing and midwifery: Empirical insights about lecturer practitioners, consultant nurses and nurse registrars. Journal of Research in Nursing 2007;12(1):29-39.
8. Woodward VA, Webb C, Prowse M. Nurse consultants: organizational influences on role achievement. Journal of Clinical Nursing 2006;15:272–80.

9. Henwood S, Booth L, Miller PK. Reflections on the role of consultant radiographers in the UK: The perceived impact on practice and factors that support and hinder the role. Radiography 2016; 22(1):44-49
10. McSherry R, Mudd D, Campbell S. Evaluating the perceived role of the nurse consultant through the lived experience of healthcare professionals. Journal of Clinical Nursing 2007:16:2066-80.
11. Graham IW, Wallace S. Supporting the role of the nurse consultant – an exercise in leadership development via an interactive learning opportunity. Nurse Education Today 2005;25:87–94.
12. McSherry R, Johnson SC. Demystifying the nurse/therapist consultant: A foundation text. Cheltenham, UK: Nelson Thornes, 2005.
13. Guest DE, Peccei R, Rosenthal P, Redfern S, Wilson-Barnett J, Dewe P et al. An Evaluation of the Impact of Nurse, Midwife and Health Visitor Consultants. London: King's College, 2004.
14. Coady E. Role models. Nursing Management, 2003; 10: 18–21.
15. Hardy M, Nightingale J. Conceptualising the transition from advanced to consultant practitioner: career promotion or significant life event? Journal of Medical Imaging and Radiation Sciences 2014; 45: 356-364
16. Department of Health. Meeting the challenge: A strategy for the allied health professions. London, UK, Department of Health, 2000.
17. Hardy M, Snaith B. How to achieve consultant practitioner status: A discussion paper. Radiography 2007; 13(4): 265-270.
18. Fairly D. Nurse consultants as higher level practitioners: Factors perceived to influence role implementation and development in critical care. Intensive Crit Care Nurs 2003;19:198-2006
19. Rees Z. Consultant breast radiographers: Where are we now? An evaluation of the current role of the consultant breast radiographer. Radiography 2014;20(2):121-125
20. Harris R, Paterson A. Exploring the research domain of consultant practice: Perceptions and opinions of consultant radiographers Radiography 2016: 22(1):12-20.
21. Harris R, Paterson A. Exploring the research domain of consultant practice: Experiences of consultant radiographers. Radiography 2016; 22(1):e25-e33.
22. Forsyth L, Maehle V. Consultant radiographers: Profile of the first generation. Radiography 2010;16(4):279-85.
23. Ford P. Guest Editorial: Consultant radiographers - Does the profession want them? Radiography 2010;16(1): 5-7.
24. Ford P. The role of the consultant radiographer – experience of appointees. Radiography 2010; 16(3):189-97.
25. Woodward VA, Webb C, Prowse M. Nurse consultants: their characteristics and achievements. Journal of Clinical Nursing 2005;14:845–54.
26. Booth L, Henwood S, Miller P. Reflections on the role of consultant radiographers in the UK: What is a consultant radiographer? Radiography 2016; 22(1):38-43.
27. Henwood S, Booth L. On becoming a consultant: A study exploring the journey to consultant practice. Radiography 2016; 22(1):32-37.

28. Kennedy, F., McDonnell, A., Gerrish, K., Howarth, A., Pollard, C., and Redman, J. Evaluation of the impact of nurse consultant roles in the United Kingdom: a mixed method systematic literature review. J Adv Nurs. 2012; 68: 721–742
29. Snaith B, Williams S, Taylor K, Tsang Y, Kelly J, Woznitza N. Is a nurse consultant impact toolkit relevant and transferrable to the radiography profession? An evaluation project. Radiography 2018, in press corrected proof.
30. Society and College of Radiographers. Consultant Radiographers - Guidance for the Support of New and Established Roles. London, UK, SCoR, March 2017. ISBN: 978-1-909802-14-8
31. Young S, Nixon E, Hinge D, McFadyen J, Wright V, Lambert P et al. Action learning: a tool for the development of strategic skills for Nurse Consultants? Journal of Nursing Management 2010; 18:105–10.
32. Health Education England. Multi-professional Framework for Advanced Clinical Practice in England. Available at: https://www.hee.nhs.uk/sites/default/files/documents/Multi-professional%20framework%20for%20advanced%20clinical%20practice%20in%20England.pdf. Accessed 19th March 2018.
33. Charters S, Knight S, Currie J, Davies-Gray M, Ainsworth-Smith M, Smith S et al. Learning from the past to inform the future – A survey of consultant nurses in emergency care. Accident and Emergency Nursing 2005; 13:186–193.
34. Harris R, Society and College of Radiographers. Personal Communication 14.06.18.
35. Chan GK, Brykczynski K, Malone RE, Benner P. Interpretive Phenomenology in Health Care Research. ISBN-13: 9781930538887. Sigma Theta Tau International 2010.
36. Hardy M, Nightingale J. Conceptualising the transition from advanced to consultant practitioner: role clarity, self-perception and adaptation. Journal of Medical Imaging and Radiation Sciences 2014; 45: 365-372
37. Snaith B, Radiology Mid Yorkshire NHS Trust, personal communication, 2009
38. Removed for author anonymity
39. Myers-Briggs Type Indicator https://www.myersbriggs.org/my-mbti-personality-type/mbti-basics/home.htm?bhcp=1 Accessed 10.06.18
40. Healthcare Leadership model 360 feedback tool https://www.leadershipacademy.nhs.uk/resources/healthcare-leadership-model/supporting-tools-resources/healthcare-leadership-model-360-degree-feedback-tool/ Accessed 10.06.18
41. Society and College of Radiographers. 2016-2021 Society and College of Radiographers Research Strategy. London: SCoR. 2015.
42. Society and College of Radiographers. Consultant Practitioner Accreditation (membership site only). Found at https://www.sor.org/career-progression/consultants/consultant-practitioner-accreditation. Accessed 21st March 2018

42. Mitchell T, Butler-Williams C, Easton K, Ingledew I, Parkin D, Wade S, Warner R. The consultant nurse — expert practitioner and so much more. British Journal of Nursing 2010; 19(8):481-488