NHS
Health Education England

Supporting success

Developing career pathways for diagnostic imaging support worker roles: literature review and expert group survey

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Introduction

Health Education England is working with the Society and College of Radiographers (SCoR) and Kings College London (KCL) to maximise the contribution and development of imaging support workers (defined as those non-registered staff typically employed in *Agenda for Change* bands 2, 3 and 4). This work is part of HEE's wider allied health professions support workforce programme, and in response to the independent review of diagnostic services across England.

A national expert group was established to guide this work which focused on:

- roles and responsibilities,
- education and training,
- supervision and delegation,
- deployment,
- operating models, including the role of delivery networks in workforce planning and development, and,
- securing future workforce supply.

A rapid review of the literature was conducted by KCL. This paper summarises the results of that review. It briefly covers the historical development of support worker roles in the profession, recent reports, and issues that support workers and services can face when seeking to develop the roles and create progression pathways, including into pre-registration degrees.

The development of support workers in imaging radiography

The radiography profession was at the forefront of developing assistant practitioner roles in the NHS, initially in response to staff shortages (Stewart-Lord et al., 2011 and Baker, 2016). The publication of The NHS Plan (Department of Health, 2000), the report of the National Radiotherapy Advisory Group, and Radiography Skill Mix (Department of Health, 2003) led to the introduction of the Assistant Practitioner role two decades ago. The latter set out a four-tiered service delivery model that commenced with the assistant practitioner role[1],[2].

Radiography Skill Mix (ibid) proposed that the assistant practitioner role be based, educationally, on the education level 3 National Vocational Qualification (NVQ) (Diagnostic and Therapeutic Support[3]). The role was defined broadly as one that will: "*…perform protocol limited clinical tasks under the direction and supervision of a State Registered practitioner* "(Department of Health, 2003:11).

Clear guidance was provided early on by the SCoR about the appropriate scope of practice for assistant practitioners. The College also introduced and continues to operate a voluntary register for assistant practitioners. Perhaps because the profession was the first to

[1] The other levels were State Registered Practitioner, Advanced Practitioner and Consultant Practitioner.
[2] The Scottish government initially centralised design and development of the role (Price et al., 2015).
[3] This qualification no longer exists.

systematically develop AP roles and deploy them, almost all the research evidence focuses on this role and not the contribution of band 2 and band 3 support workers.

Service demand and the potential of the support workforce

Imaging capacity has not, in recent years, been able to expand sufficiently to meet rising demand. The wider impact of COVID-19 has further exacerbated pressures on services (Richards, 2020). One of the ways to increase diagnostic activity is to maximise the contribution of support workers, including developing new career pathways both into the profession and through it to registered grades – an approach to workforce planning that is described as "grow your own" (HEE, 2021). Developing support worker capacity and capability will also support the career development of registered staff into enhanced and advance practice roles, as there is evidence that effective deployment of assistant practitioners frees up the time of registered radiographers (Palmer et al., 2018).

Professor Sir Mike Richards' Diagnostics: Recovery and Renewal independent review (2020) recommended a 2,670 increase in the number of administration and band 2/3 support roles in imaging services, along with 2,500 additional assistant practitioners. The report does not only focus on increasing capacity through expanding the numbers of staff in post as a means of meeting rising demand. The report also notes that rising demand can be met through: *"…the development of new roles, flexible working, changes to education and training and new ways of working"* (2020: 37).

Comprehensive data on the current radiography support workforce is not available. Snaith and colleagues (2018), estimate that there are currently around 570 assistant practitioners in post. If the Richards' recommendation is fully implemented there would therefore need to be a 438% growth in assistant practitioner roles. The most recent College of Radiographers (2020) workforce census suggests, on average, that diagnostic radiography establishments employ 5.4% of their establishment at band 3 and band 4 – although it is very likely that this will vary by service. The census also suggests that 7.4% of band 3 posts and 16.5% of band 4 posts are vacant and that the support workforce is ageing, with 23.7% of band 3s aged 55 years or older and 16.3% of band 4s. Data on other characteristics of this workforce, including gender and ethnicity, were not available during the literature review.

The current deployment of support workers in imaging services

The *Radiology, GIRFT Programme National Speciality Report* (Halliday et al., 2020) notes: "*…few trusts benefit from the full opportunities* [of support workers] *to increase capacity* (page 37). A key reason for this is that only around half of services employ assistant practitioners (Richards, 2020). Within the services that do[4] there is inconsistent deployment of the role in terms of tasks and professional responsibilities (Stewart-Lord et al., 2011, Snaith et al, 2018, Halliday et al., 2020 and Richards, 2020). Snaith and colleagues (2018) report:

[4] As noted there is no peer-reviewed evidence of the roles, responsibilities and impact of band 2 or 3 support workers in radiography. One of the outputs of the project by the Expert Group has been to set out what would be expected of support workers at this level.

"The scope of practice…appears to vary significantly depending on modality and organisation in which they are deployed. This is strikingly evident in the supply and administration of medicines, such as contrast agents, by assistant practitioners."

This inconsistency can mean assistant practitioners *"are under-used even when the rest of the team are extremely busy"* (Halliday et al., 2020:37). Unclear role boundaries appear to have been an issue since the original creation of the assistant practitioner role as found by Stewart-Lord in 2011.

Assistant practitioners are overwhelmingly employed in either general radiography or mammography settings – 90% of the 193 respondents to Snaith and colleagues (2018) survey were employed in these two settings. Moreover, Snaith and colleagues (ibid) suggest that the growth of the role has stalled. Most of the assistant practitioners they surveyed were trained between 2008-2011, in the immediate aftermath of the introduction of the Four-Tier structure (Department of Health, 2003). Their survey also revealed that, whilst the majority (57%) of imaging assistant practitioners possessed a foundation degree, the remaining workforce held a wide variety of other qualifications of different lengths (credits) and, in some cases, education levels:

- 27% obtained a Certificate of Higher Education
- 10% a Diploma in Higher Education
- 9% had started an Honours Degree but not completed
- 7% were trained through "in-house" programmes
- 7% a Scottish Higher National Certificate
- 4% a NVQ Level 3
- 1% a BTEC Higher Diploma
- 1% a City and Guilds
- 4% had "other" qualifications

The survey also found inconsistency in supervision. A small number of assistant practitioners reported being utilised above their scope of practice, but others reported that they were not permitted to carry out tasks they were qualified to perform. Respondents reported that, whilst they felt their contribution was generally appreciated by colleagues, they were frustrated by a lack of career development opportunities. Nearly half (45%)[5] said they wished to progress into registered roles but experienced barriers in terms of funding and course availability. Snaith and colleagues (2018) quote two respondents views that they felt summarised AP's views more generally with regards to their status and careers opportunities:

"I feel after 9 years of experience assistant practitioners have little or no chance of progression, unless you sidestep into management, and I personally feel underappreciated for what I do."

The role of assistant practitioner is a lonely one. You are neither one thing nor another. The title is misleading as you don't 'assist' you 'do'.

[5] This is a higher proportion than reported by other support worker occupations such as maternity (Griffin, 2018) and suggests a significant "grow your own" pipeline from within the profession is the barriers to Higher Education can be addressed.

Interestingly the issues raised by Snaith and colleagues (2018) echo those of an earlier survey of imaging and therapeutic radiography assistant practitioners undertaken by Stewart-Lord and colleagues in 2011. This survey (n=119 for imaging roles) reported the following:

- Assistant practitioners' roles were not always fully integrated into services
- There were variable levels of supervision reported
- Roles and responsibilities were not clear or consistent between services
- There was a lack of capacity within some services to develop AP roles
- Not all services had undertaken a comprehensive workforce review (as recommended) before implementing the role
- There was lack of clarity between assistant practitioner and band 5 roles: *"The tasks performed by radiographers and assistant practitioners have become a 'grey area' with boundaries blurring, exacerbated by locally increased scopes of practice by some assistant practitioners"* they report.

More widely, Halliday and colleagues (2020) report:

"During our deep dives, we saw a range of different approaches to using the non-registered workforce to deliver crucial elements of this workload. These included: using assistant practitioners to conduct image acquisition, releasing radiographer time to focus on reporting or on more complex modalities; training clinical support workers or imaging assistants to perform cannulation and help radiographers and radiology nurses prepare patients for a CT or MRI scan. This approach minimises turnaround time between scanning and ensures there are no delays when the scanner is available; allowing trained clinical support workers or imaging assistants to vet patients for ultrasound, so that the sonographer doesn't have to. This then reduces the amount of time the sonographer has to dedicate to this 'administrative' task" (2020:36)

Expert Group: Survey results

Expert Group members were surveyed to ascertain their views about the issues that support workers employed in diagnostic radiography services faced, along with interventions they believed would enable better workforce development and why they thought AP roles were not deployed in all services. In total 58 members responded to the survey. This section summarises the results of the survey.

Key issues preventing effective support workforce development and how they could be addressed

Based on the literature review, respondents were presented with a series of issues that support workers might face. They were asked whether, in their experience, they thought support workers did face these issues.

Table 1 shows the proportion of respondents who strongly agreed or agreed[6] that each issue was a factor inhibited full workforce development and deployment.

Table 1: Issues negatively impacting on support worker development & deployment

Issue	% Agreeing or Strongly Agreeing	% Strongly Agreeing
Funding[7]	81.8	48.3
Education not locally available	78.8	36.4
Lack of effective workforce planning	78.8	30.3
Absence of guidance on roles & responsibilities	75.7	18.2
No clear progression pathways available	75.7	51.5
Insufficient local education capacity	72.7	35.3
Absence of up-to-date delegation guidance	72.7	30.3
Lack of leadership	66.7	36.4
Poor job design	59.4	21.9
Lack of valuing of support roles	51.4	24.3
A need for workforce data	51.4	24.2
Support worker education too complex	39.4	24.2

Respondents were provided with a free text option to include any other barriers which they felt were significant but that had not been included. The following additional issues were identified:

- Lack of transferability in respect of support worker education and training.
- The need for more effective and consistent recruitment, for example consistent entry-requirements in respect of experience.
- The lack of a business case to support more extensive deployment of support workers.

Respondents were then asked to state interventions they thought would help services address these issues. Their free text answers were codified. The proposed enablers identified in order of the number of respondents citing them were:

1. Clear guidance for support staff and services on progression routes and how to access them, including into pre-registration degrees (n=10).
2. Better access to education programmes that are relevant to the profession (n=7).
3. Guidance on the scope of practice for support workers (n=6).

[6] Other options on the Likert scale were: Disagree, Strongly Disagree or Unsure. The only items where a significant number of people were Unsure were "Data" (27.3%) and "Support worker education too complex" (30.3%). The lack of view on support worker education programmes by a third of respondents is worth noting.
[7] In the open text answers a number of respondents referred explicitly to difficulties in accessing their Trust's apprenticeship levy funds.

4. Case studies of support worker deployment to raise awareness of the contribution roles can make to service delivery (n=6).
5. Easy to understand guidance about apprenticeships (n=6).
6. Increased capacity to support education and development of support staff for example mentors and Practice Development Radiographers (n=6).
7. Guidance on supervision and delegation (n=1).
8. Renaming of the role (n=1).
9. Improved appraisals (n=1).

Whilst the suggested interventions have been listed above as standalone items, respondents recognised the importance of taking a joined-up approach when seeking to build support workforce capacity and capability. A quote from one respondent demonstrates this:

"Devise the supervision requirements against a set of competences and standards. Core training objectives and requirements as baseline, with access to e-learning".

A respondent who identified the need to improve access to "relevant" education, described an expansive vision of what "relevant" means:

"Relevant means occupational specific, module approach, funded, flexible, transferrable, recognised, support for functional skills and accessible (e.g., e-learning)".

Assistant Practitioners

Survey respondents were specifically asked their views, in a free text question, on why they thought around half of services[8] had not deployed assistant practitioner roles. The responses are set out in Table 2 below.

Table 2: Factors negatively impacting on the deployment of Assistant Practitioners

Factor	No. responses
Band 5s used to fill assistant practitioner function (seen as more flexible)	13
Absence of education programmes to develop AP roles	8
Lack of willingness to develop the role	5
Insufficient capacity to supervise the role	5
Lack of awareness about the role	3
Lack of funding for the role	1

In respect of the most cited factor above ('Band 5s filling the role/lack of flexibility') typical comments were:

"The role's too generic, managers prefer registered staff like B5s".

[8] Independent review of diagnostic services across England.

"Limited scope of practice".

The perception that the role needs to be closely supervised led one respondent to state that it represented: "*poor value for money".* Another, whilst believing that services saw the value of the role, felt many were "*too busy"* to take time to develop it.

Conclusion

In the context of rising demand for imaging services, this review has set out the factors that have been identified as inhibiting the full utilisation of support worker roles. These issues are not unique to the diagnostic radiography profession or new. The first modern research on support roles (in adult nursing) found that healthcare assistants and assistant practitioners experienced lack of role clarity, underutilisation, variable access to quality education and limited development opportunities (see Bach et al., 2008 for example). Indeed, the Cavendish Review (Department of Health, 2013) sought to address these issues, but despite many examples of innovation and good practice, they endure. The need to increase diagnostic activity means there is an opportunity to build on the good practice to enhance support worker capacity and capability in a safe and patient centred way, including in new service models.

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