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RePAIR

Reducing Pre-registration Attrition and Improving Retention in Radiotherapy

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Executive summary

Background

Recruitment and retention of key NHS staff has been an ongoing challenge for a number of years (1-3). In 2015 the student bursary system in England was replaced by student loans and the cap on the number of student training places for nursing, midwifery and allied health professions (AHPs) was abolished (4). In 2020 the NHS Learning Support Fund was established as an initiative to financially support healthcare students during their training (5). In response to the increase seen in student attrition and challenges with retention within healthcare training programmes, the Reducing Pre-registration Attrition and Improving Retention (RePAIR) project was set up by Health Education England (HEE) in 2015 to explore effective interventions to improve retention across the student journey – from pre-enrolment to two years post-qualification.

Initially covering the fields of nursing, midwifery and therapeutic radiography, the RePAIR project identified four steps in the journey from student to newly qualified practitioner. These are pre-enrolment; enrolled and studying; transition to qualified practitioner – known as 'the flaky bridge'; and early clinical career. The 15 project recommendations, in the form of a toolkit were promoted system wide to all professions to improve recruitment and retention (6). The RePAIR project has been the enabler for a number of additional workstreams to address the ongoing issues with recruitment and retention within the NHS, and now includes all healthcare professional groups. In March 2021, two RePAIR champions were appointed on a six-month secondment to the Society of Radiographers to explore the implementation of the RePAIR recommendations within radiotherapy services across England. It is hoped that the outcome of this project workstream will contribute to the volume of evidence from the HEE National RePAIR programme in relation to the recruitment and retention of therapeutic radiographers and shape future workforce transformation in the aftermath of COVID-19.

Project aims

- Map progress of the implementation of the RePAIR recommendations into Radiotherapy practice across England
- Identify local and regional good practice, opportunities and challenges in relation to the RePAIR recommendations
- Develop a shared online live resource to showcase good practice
- Further embed partnership working between clinical services and education providers
- Align project resources with other key stakeholders programmes
- Understand the relevance of findings from RePAIR, to new ways of working for pre-registration and post registration education and training in radiotherapy and oncology, developed during the COVID-19 pandemic

Approach

A two-stage project was undertaken:

1. A mixed method survey across higher education institutions (HEIs) in England delivering pre-registration Health and Care Professions Council (HCPC) approved Therapeutic Radiography programmes of education n=10, and NHS radiotherapy healthcare providers (HCPs) in England n=52 to assess progress with the implementation of RePAIR recommendations
2. Follow-up semi-structured interviews and dual moderator focus group with key stakeholders inclusive of students on a Clinical Placement Expansion Programme (CPEP) n=20

Key findings and discussion

All HEI's in England delivering pre-registration HCPC approved programmes of education responded to the survey (n=10). Responses were received from 46 of the 52 NHS Radiotherapy HCP's and 20 students were surveyed during a study day on a CPEP programme. Following the survey there were 5 follow-up interviews conducted from a mixture of both HEI (n=2) and HCP's (n=3) alongside a focus group. The focus group included 10 participants with an even split of HEI's (n=5) and HCP's (n=5) and included representation from each region within England. This was indicative of the interest from all regions in the training, education and retention of the future workforce. Key findings included:

- Of those responding to the survey, 80% of HEI's (n=8) and 96% of HCP's (n=44) were in support of further work to explore standardisation of all clinical assessment documentation
- Those responding to the HEI survey (n=10) felt that on average 18.9% of clinical practice could be replaced by simulation. Those responding to the HCP survey (n=46) felt that on average 23.5% of clinical practice could be replaced by simulation and of the students surveyed (n=20) the average was 13%, ranging up to 20%
- 70% of HEI's surveyed (n=7) and 51% of HCP's surveyed (n=23) had informal student support mechanisms such as peer support and buddy systems however only 20% of HEI's (n=2) and 15% of HCP's (n=7) and had extra support specifically for year 2
- Physical and mental health and wellbeing issues, and what the HEE recommendations term "wrong career choice", were the most common reasons cited for attrition. Recording of attrition data was variable across all settings
- 80% of HEI's surveyed (n=8) and 30% of HCP's surveyed (n=14) had student retention initiatives however the content was inconsistent. 45% (n=21) of HCP's surveyed had retention initiatives for qualified staff, including clear career framework, careers clinics and mentorship

- All HEI's surveyed (n=10) were involved in student open days and careers events and 70% (n=7) collaborated with HCP's on clinical open days. 65% of HCP's (n=30) run clinical Radiotherapy department open days
- Formal use of any 'culture of care' tools (7) was not standard practice in HCP's with only 4% (n=2) of those surveyed using a validated tool. However, 30% of HEI's (n=3) included 'culture of care' within their programme
- All HEI settings (n=10) had some form of transition from student to registered practitioner, with 78% of HCPs (n=36) having a preceptorship programme in place
- Awareness of RePAIR was low throughout the profession; however, a number of workstreams addressing the initiatives were evident. These included preceptorship initiatives, apprenticeships, HEE-funded posts such as RePAIR fellows, and widening access initiatives.

Recommendations

The report findings and discussions identified a number of different proposals that could be explored further. Based on the largest response rates and aligning with national workforce agendas, a 'traffic light' system was used to identify the most important priority areas from the proposals (red being highest priority followed by amber then green). These were discussed with stakeholders and the priorities were finalised as shown in the tables below.

- There is strong evidence to further explore the requirements for implementing a possible national model of standardised clinical assessment for therapeutic radiography students
- Evidence from the survey data and from those attending the focus groups demonstrated that up to 20% of clinical practice could be replaced by simulation. Activities included VERT, planning placements and role play with actors. This requires further investigation, both in relation to the amount and types of simulation that might be feasible and the timing of this within programmes. This includes understanding how and when simulation could be best optimised and embedded in education and training pre-registration programmes
- The value of simulation in supporting those returning to practice and within specific 'return to practice' programmes, together with the capability of simulation to support internationally qualified radiographers requires further exploration
- A dedicated online resource package, with career-signposting and transparent outreach information to allow potential therapeutic radiography students to make informed choices about Therapeutic Radiography as a career and profession would be valuable. It is important that this harmonises with existing resources and profession-specific online recruitment materials
- Further work is recommended to identify how best to support HEIs and radiotherapy HCPs to collaborate on shared models of pre-qualification/pre- registration support and 'transition to practice' modules. This would help to ease the transition from student to qualified practitioner, address the 'flaky bridge' and prepare students for induction and preceptorship. Enabling students and newly qualified professionals to actively be able to seek support early on in their training or within their professional career
- Creation of a national student support toolkit, allowing HEIs and radiotherapy HCPs to co-produce a repository of support mechanisms, such as buddy systems, peer support, focus groups, social media groups and 'culture of care' tools is recommended specifically for Therapeutic Radiography students. It is noted the SoR has a Students and New Professionals Officer, and this work is in development

- There are opportunities for HEIs and radiotherapy HCPs to explore innovative strategies for increasing student placement capacity, such as non-traditional/non-clinical placements, peer support for students to support learning and development, buddy schemes and more than one student per practice area, as examples to meet the transformation agenda and clinical expansion programmes
- 'Culture of care' philosophy (7) to be embedded within the pre-registration curriculum and clinical practice and its importance reinforced within preceptorship and professional practice. An inclusive curriculum and recognising diversity and equality should be a priority with health and wellbeing support check-in points embedded throughout student training and continued throughout employment
- There is opportunity for access to financial support to be streamlined for all health care students, including radiotherapy students, requiring additional support, particularly for placement costs. Hardship funds to be rebranded to 'instant access loans' and be accessible on more than one occasion. The time to pay back any loans could be increased, and repayment instalments considered. The impact the NHS Learning Support Fund (5) has had on recruitment needs to be understood for students from 2020
- It is recommended that HEIs and HCPs collaborate and discuss attrition data regularly and review processes to support students to remain on their programme of study, especially when attrition is related to placement experience. (directly or indirectly)
- Different roles titles are frequently used by Radiotherapy HCPs and HEIs to describe (student) support roles, it is suggested that work is led nationally to standardise titles, and to help protect time for those providing education, training and support for all learners in the workplace
- There should be regular feedback and feedforward on progress from both clinical practice staff and academic staff to aid student retention. Newly qualified staff should also receive regular feedback and feed forward from their preceptor or mentor
- In order to help support potential students making the right career choice it is recommended that Radiotherapy HCPs continue to offer clinical visits (COVID-19 permitting) for prospective students

- To support local employment it is recommended that HCPs inform their local HEI of any Band 5 vacancies
- There is evidence demonstrating the benefits of employing students' as Assistant Practitioners (Band 4) while awaiting HCPC registration
- There is strong support for clearer role expansion opportunities and continuing professional development (CPD) activities, and investment in post registration education and training to complement clinical roles and careers clinics to aid retention of qualified staff and develop the four pillars of (advanced) clinical practice, which are clinical practice, leadership, management and education (8)
- Competency of those involved in student assessment needs to be reviewed annually, in collaboration with linked HEIs. Those involved in student assessment are encouraged to work towards formal qualification such as College of Radiographers (CoR) Practice Educator Accreditation Scheme (PEAS accreditation) (9)

A number of workstream recommendations have been identified from the priority areas:

1. Effective recruitment initiatives (including outreach)
2. Effective retention initiatives, national student support toolkit
3. Strategies to increase student placement capacity (including the role of simulation and non-traditional/ non-clinical placements)
4. Placement allocation and funding support
5. Standardised clinical assessment documentation
6. Preparation for practice (addressing the 'flaky bridge' of transition from final year student to employment as a newly qualified professional, described by RePAIR as step 3 in the practitioner journey) and early career support (preceptorship)

Project development

The six priority workstream recommendations from the Radiotherapy RePAIR Champion project have led to the development of a general AHP online live resource toolkit – the AHP Support Programme for Implementing Recruitment, Retention and Engagement (ASPIRRE), outlined in Appendix 1 – to aid in the implementation of the different workstreams, with further support from a Radiography special interest group (SIG). The toolkit is aimed at all of the AHP professions due to the transferable nature of the workstreams and how they fit with the broader agendas within health education.

There are two standalone projects that have been identified as requiring separate investment, research, development. These future projects will further support the development of innovative, forward thinking health care professionals and help address future student and professional workforce growth and transformation requirements and workstreams.

- A national project to further explore the requirements of implementing a model of standardised clinical assessment
- Scope, evaluate and develop simulation, working towards replacing up to 20% of clinical practice with simulation activities and embedded into other settings including 'return to practice' programmes and supporting internationally qualified radiographers. This aligns with published findings from other professional groups including occupational therapy (10-12), who recommend up to 25% of clinical practice can be replaced with simulation activity. Other professional groups are currently scoping the optimum use of simulation within training programmes (13) in line with HCPC Covid recommendations (14) and HEE's National toolkit to support the use of simulation in health and care (15)
- This requires further investigation on how this can be embedded in training programmes, and other settings including 'return to practice' programmes and supporting internationally qualified radiographers. It is recommended that professional body guidance document on simulation be produced.

Outputs

1. Radiotherapy RePAIR project report, dissemination to all stakeholders, showcasing areas for future work such as the Radiotherapy Simulation project
2. ASPIRRE toolkit, case studies and exemplars for stakeholders to access
3. Radiography Special interest group to facilitate ongoing workstreams
4. A national online recruitment resource for prospective therapeutic radiography students
5. Poster of ASPIRRE workstreams
6. Publications, webinar (Appendix 2) and conference presentations of findings to ensure a wide target audience is reached
7. Recognition and development of future projects/workstreams to address key recommendations

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Background to the project

In 2020, the number of whole-time equivalent (WTE) therapeutic radiographers in post was estimated at 3,470 (16). It is recognised that the cancer workforce and radiotherapy workforce both need to expand to meet the demand for cancer services (17). Recruitment and retention of key NHS staff has been an ongoing challenge for a number of years (1-3). In 2015, the student bursary system was replaced by student loans and the cap on the number of student training places for nursing, midwifery and allied health professions (AHPs) was abolished (4). This led to a significant decrease in the number of applicants (particularly mature and career-change applicants) for healthcare degree training programmes. In 2020 the NHS Learning Support Fund was established as an initiative to financially support healthcare students during their training (5). In 2017, Health Education England (HEE) published a cancer workforce plan on behalf of the NHS (17), in which it was acknowledged that HEE had prioritised its resources to support the Independent Cancer Taskforce 2015 recommendations (18).

The 2017 HEE report recognised the importance of increasing the numbers of therapeutic radiographers employed in England and committed to securing 1,560 more whole time equivalent (WTE) therapeutic radiographers by 2021 (17). It has since been recognised that a 45% increase in therapeutic radiographers is needed by 2029 (19). The challenges in student recruitment and retention have been well documented (6, 17-21) and more recently recognised as a strategic priority in the transformation of the NHS and care workforce to ensure that those qualified as healthcare professionals want to remain in the NHS and can see a clear development pathway (22). Poor retention among trainee radiographers has been attributed to a number of reasons, including finances, academic issues, placement, stress, lack of support and mental health (23, 24). This has been further exacerbated by the impact of COVID-19, particularly in relation to feeling stressed and overwhelmed (25). Ethnic minority students have reported higher levels of anxiety than White students and are 30% more anxious about the impact COVID-19 could have on their future careers (25). They are also more likely to report a more negative work experience once qualified (26).

Creation of RePAIR

The RePAIR project was initially set up by HEE in 2015, covering the fields of nursing (adult, child, learning disabilities and mental health), midwifery and therapeutic radiography. It has since expanded to include all AHPs. RePAIR explored effective interventions to improve retention across the student journey from pre-enrolment (step 1), enrolled and studying (step 2), transition to qualified practitioner- “the flaky bridge” (step 3) and early clinical career (step 4). There were 15 recommendations developed from the project findings, setting out what should be done system-wide to improve recruitment and retention (6). These were formulated into a toolkit and were promoted system wide to all those involved in the education, training and supervision of pre-registration healthcare students and newly qualified professionals. The toolkit was designed for use by staff in Higher Education Institutions (HEIs), staff in Healthcare Provider organisations (HCPs) and policymakers in England.

The RePAIR project has been the enabler for a number of different workstreams to address the ongoing issue with recruitment and retention in the NHS. A number of regional RePAIR fellows have been appointed on a 12-month rotational secondment to explore and expand on the implementation of the project’s 15 recommendations. In March 2020, the COVID-19 pandemic hit, and the work of RePAIR had to change and adapt to the different ways of education and training that were rapidly being developed. COVID-19 had a significant impact on the education and training of students, with academic study being moved online, clinical placements being cut short and some students being unable to complete their studies on time. The knock-on effect of this on the future workforce is yet to be fully realised. However, the results of an HEE 2020 study on the pandemic’s impact (25) showed that, while over 90% of students reported having a positive placement experience, fewer than 43% felt that online academic learning adequately met their learning needs. 72% of students surveyed were worried that they would fall behind and not be able to catch up as a result of COVID-19, and were concerned about being clinically competent at the point of qualification (25).

In 2021, HEE published its draft Allied Health Professions (AHP) career strategy (27). It recognised the need to significantly increase the AHP workforce, including therapeutic radiographers. The NHS recognises that there needs to be a workforce that is ready for the future, and adaptable and flexible in its approach, to transform healthcare provision and cancer care for the 21st century (26). Significant investment has been made in a number of recruitment initiatives, including the I See the Difference campaign and the WOW Show. During the first wave of COVID-19 there was a marked increase in the number of people interested in pursuing a healthcare career, with a 77% increase in the number of ‘hits’ for therapeutic radiography on the NHS Careers website and universities seeing a 17.5% rise in acceptances to study AHP programmes in 2020 (27). It is important to harness this momentum so that the renewed interest in therapeutic radiography can at the very least be maintained, and ideally increased. This will help to sustain and develop the future workforce to address current and future therapeutic radiographer shortages.

Dedicated posts

The development of a number of HEE-funded posts has enabled RePAIR and other initiatives to be explored and developed further within radiotherapy education and clinical practice. In 2020, two HEE-funded joint Society of Radiographers (SoR) and Macmillan Cancer Support clinical fellow posts were established; their remit was to target interventions aimed at raising the profile of therapeutic radiography and roles within the profession.

In 2021, two HEE-funded RePAIR champion posts were developed within the SoR, with the task of exploring the implementation of the RePAIR recommendations within radiotherapy and the impact of COVID-19 on the education and training of therapeutic radiography students. The work of the RePAIR champions is evidenced in this Radiotherapy RePAIR project report, including details of the project structure, findings

and recommendations. The project team has made a number of proposals for ongoing workstreams and development. Ultimately this work aims to be a springboard for key stakeholders to develop activities to enhance and promote therapeutic radiography as a unique and important career that is integral to the care pathway of cancer patients and their families.

Project design

Project aims and objectives were agreed between HEE and SoR prior to the appointment of the two therapeutic radiography RePAIR champions to cover England for a six-month period (0.4 WTE each).

Aims

- Map progress of the implementation of the RePAIR recommendations into practice across England.
- Identify local and regional good practice, opportunities and challenges, with possible solutions, to support the implementation of workforce growth and transformation.
- Develop a shared online live resource to showcase good practice, case studies and exemplars with multiple stakeholders, to support student recruitment and retention.
- Further embed partnership working of clinical services and approved education providers.
- Align resources with other key stakeholders' programmes, including the Society and College of Radiographers (SCoR) professional outreach officer, HEE RePAIR fellows and Macmillan therapeutic radiography fellows.
- Understand the relevance of findings from RePAIR to new ways of working for pre-registration and post-registration education and training in radiotherapy and oncology developed during the COVID-19 pandemic.

Methodology

A two-stage mixed-method project was undertaken.

1. A mixed method survey across HEI's in England delivering pre-registration Health and Care Professions Council (HCPC) approved Therapeutic Radiography programmes of education (n=10), and NHS radiotherapy HCP's in England (n=52) to assess progress with the implementation of RePAIR recommendations
2. Follow-up semi-structured interviews and dual moderator focus group with key stakeholders inclusive of students on a Clinical Placement Expansion Programme (CPEP) n=20

Survey

Two mixed method surveys were designed, each one relevant to either HEIs or HCPs; this meant all questions were relevant to the organisation completing it. Questions were formulated around the 15 RePAIR recommendations, with some recommendations having multiple questions. The HEI survey consisted of 44 questions with an estimated time of eight minutes, the HCP survey consisted of 49 questions in total, with an estimated completion time of nine minutes. Both surveys were tested by a survey platform provided by survey software specialist Alchemer and received 'low fatigue' and 'high accessibility' scores. Questions were similar on each survey to allow for comparisons to be drawn from the data within each RePAIR recommendation. A range of closed and open questions produced both quantitative and qualitative data. The survey was piloted by representatives from both academic and clinical practice and overseen by the SoR professional education and data management teams.

The HEI survey was distributed via the chair of the heads of radiography education group and the HCP survey via the chair of the radiotherapy managers group. The survey was open for four weeks and required one response per organisation. The link was sent in the initial e-mail, with a reminder 10 days later, followed by a targeted approach to those centres yet to respond, alongside social media promotion of the survey and the RePAIR champion role.

Focus group, interviews and student feedback

Focus group

Within the survey was a consent box for further communication. Participants who consented (HEI n=8, HCP n=26) were sent a focus group invitation or request for a follow-up interview where appropriate. Topics for focus group discussion and interviews were developed from initial analysis of the survey results. Purposive sampling was used to select focus group members, ensuring all regions were represented by either an HEI or HCP. The one-hour focus group consisted of 10 participants, (n=5 HEI's and n=5 HCP's) with representation from SoR for quality assurance and to act as a scribe. The theme was 'Awareness of RePAIR'. Before the session, the focus group members were sent a copy of the RePAIR recommendations alongside joining information and ground rules.

Questions focused on when participants in the focus group had first heard of RePAIR, which recommendations they saw as a priority in their workplace, any initiatives or workstreams they were involved in that related to RePAIR, and finally, where they saw the future of the RePAIR project. The focus group discussion was recorded on Microsoft Teams, and the recording then transcribed and analysed. The results were triangulated with survey responses and interview data, and themes drawn.

Interviews

The survey results allowed mapping of current practice in relation to implementation of the RePAIR recommendations nationally. This gave insight into areas where good practice could be highlighted and used as an exemplar. Individual departments (n=5) that highlighted areas of interest were contacted to arrange a follow-up interview (n=3 HCP's and n=2 HEI's); this included further discussion and consent to share their knowledge and expertise in the RePAIR toolkit and online resource. Themes were extra student support, the use of buddy systems and peer support.

Student feedback

Radiotherapy students on a CPEP study day (n=20) provided further information through an online presentation and question and answer session using Slido interaction technology. These additional questions were based on the initial survey questions to allow further comparison and also covered their experiences during the COVID-19 pandemic. This session was conducted twice with a total of 20 students and representation from all the HEIs in England.

Project findings

The following section details the main findings from the survey, focus group, interviews and student information gathered against each of the 15 RePAIR recommendations set out in the 2018 HEE report *Reducing Pre-registration Attrition and Improving Retention* (6).

Recommendation 1: Standardisation of indicators for attrition

"National bodies should work together to review the current range of definitions of attrition, and model(s) for measuring this metric, to ensure that the output data is meaningful to all parts of the sector, in particular the HCPs."

There was broad agreement among all participants on the meaning of attrition. For most, this term is related to a student leaving their course before completion, or a therapeutic radiographer leaving a post to take up new employment elsewhere (either within the profession or as a career change), or resignation.

There are many reasons cited for student attrition, the most frequent being health and wellbeing, given as a reason by 80% of HEIs (n=8), followed by 70% of HEIs (n=7) citing "wrong career choice". Other reasons commonly given are shown in Table 1.

Table 1: HEI reasons for leaving a training programme

Reason for leaving training programme	HEI response rate (N=10)
Financial	50%
Health and wellbeing (physical and mental)	80%
Wrong career choice	70%
Poor placement experience	50%
Academic fail	50%

Reasons for leaving a role after qualification showed mostly movement within the profession. However, 13% of HCPs (n=6) highlighted career change as a reason for leaving a role, as shown in Table 2.

Table 2: HCP reasons for leaving a qualified role

Reasons for leaving qualified role	HCP response rate (N=46)
Promotion	53%
Relocation	62%
Career change	13%

Student attrition

All HEIs keep a formal record of student attrition, but only 11% of HCPs (n=5) do the same. Figure 1 shows a third of HCPs kept informal records but that leaves almost 58% (n=26) having no record of student attrition. One of the major contributing factors appeared to be whether the student completed rotational or fixed placements, and therefore might not attend the same HCP more than once.

Figure 1: HCP record of student attrition

There was common agreement from the focus group that funding issues were frequently cited as a reason for leaving a training programme, but these were often intertwined with other reasons. As one focus group member observed:

"I think it is really hard to pick one because so many of them are so intertwined. I think we know why. A lot of the time it can be linked to placement experience. Exactly as X [another focus group member] was saying, money is a huge issue and it has been compounded by the fees and the bursary changes. That has also meant that the demographic of the students has changed so we do not get so many of what are generally the amazing more mature students who bring a fantastic range of life experiences to be really good radiographers."

Post-qualification attrition

Only a third of HCPs (n=15) surveyed were found to formally record staff attrition specifically within two years post-qualification. As with student attrition, some informal methods of recording were found but almost half had no record of staff attrition at the two-year point (see Figure 2).

Qualitative responses demonstrate that it depends on the definition of attrition. Attrition from the profession is perceived as rare and significantly less common than attrition from a specific radiotherapy department. The main reasons radiographers cite for leaving a department are promotion and relocation (see Table 2).

"In our experience, newly qualified staff will take a position either in the region they trained or wherever they are offered a job." (HCP respondent)

"Within the first two years they often then start to consider where they actually want to live and work, and this makes them move on." (HCP respondent)

Figure 2: HCP record of staff attrition

One fifth of HCP respondents (n=9) stated that any type of attrition was rare in their department. However, this leaves a significant number of HCPs that commonly lose staff, either to other departments or other professions.

As expected, reasons for moving were different regionally. Some respondents highlighted the lack of London weighting for those departments within travelling distance of the city, meaning their attrition rates were higher.

Perhaps the biggest area for concern was attrition from the profession. Career progression, salary and work-life balance were all given as reasons for leaving the profession, such as:

"Retraining in mammography/sonography with fast track to higher paid roles." (HCP respondent)

"Macmillan roles where pay and work patterns were considered more favourable." (HCP respondent)

"Family responsibilities." (HCP respondent)

This recommendation was seen as particularly important for the focus group members and there was some discussion about whether the true reasons for attrition are fully known.

"Sometimes when we try and investigate why students have left, maybe we do not get the full picture as they may not be willing to share some of their reasons for leaving the programme."

"However, if they like it they will find a way through that money aspect and it does come down to the expectations of the role I think more than anything."

Recommendation 2: Cost effectiveness of interventions

"HEIs and HCPs should work in partnership to acquire a better understanding of the cost effectiveness of interventions that are designed to improve retention."

80% of HEIs (n=8) reported working on initiatives for retention of students; however, only 31% of HCPs (n=14) reported the same. One region showed partnership working with the HCP and linked HEI providing a dedicated pre-registration workshop on a Saturday, ensuring potential students understood radiotherapy and the roles of a therapeutic radiographer.

There is a clear link between retention and the support students receive, as evidenced by these comments:

"We have increased our level of pastoral care given to students and are more proactive in assisting them with their learning journey. We have created a very positive learning environment for students and I can proudly say we have no students leave the course due to the measures we have in place." (HCP respondent)

"We are consistently developing ways in which to retain students. This is almost a weekly occurrence at the moment as we have seen student engagement dip with distance learning." (HEI respondent)

45% of HCPs (n=20) are working on staff retention initiatives, many focusing on career progression, such as: *"competency-based programme to develop from Band 5 to Band 6"*, *"role extension opportunities giving a clear career framework"* and *"expanded roles to take on more responsibility"*.

Recommendation 3: Funding support

"HEE should seek ways to make hardship funds available to encourage more prospective students, particularly mature students, to embark on a career in nursing, midwifery or therapeutic radiography."

Funding support was cited by half of HEIs as one of the main reasons for attrition.

Positively, all HEIs (n=10) and more than half of HCPs n=26) had awareness of mechanisms available to support students in accessing hardship funds. However, focus group discussions revealed that this process often caused significant stress and anxiety for students if they felt they were not able to fund their placement accommodation. One of the discussion points from the focus group was that placement accommodation was an additional cost on top of university accommodation. The term 'hardship' suggests financial difficulty, whereas this could be more an issue of reimbursement timing than lack of funds. This could impact significantly on where students choose to study and, more importantly, whether they remain on the course.

"While we are very clear about the additional costs that each student needs to pay upfront, and while we do our best to get those funds reimbursed fairly quickly there is always going to be a period of time when students are going to be significantly out of pocket. When we do have students struggling financially I suppose this is linked to one of the observations from the recommendations around hardship funds; my experience with a hardship fund is that if a student applies once then they cannot apply again." (Focus group member)

Recommendation 4: Wrong career choice

"HEIs should ensure clinical staff are actively involved in recruitment and that prospective students really do understand the career they have chosen to enter and the demands of the course."

Positively, clinical staff, a practice educator, a clinical tutor and therapeutic radiographers were all cited by respondents as being involved in student recruitment, with only 4% of HCPs (n=2) stating that such individuals were not actively involved in student recruitment.

The majority of HCPs (n=44) stated that prospective students were able to visit a department before the pandemic. However, wrong career choice is still one of the main reasons for student attrition, cited by 70% of HEIs (n=7). This suggests that a clinical visit alone does not provide enough insight to allow students to make an informed career choice.

As one focus group member said: *"There was some work done around that they (students) did not really know the profession they were going into. So when they went out onto placement we lost a lot of them."*

In an interview with one HCP, it was noted that: *"A Band 5 or Band 6 therapeutic radiographer sits on the panel for student recruitment interviews at the local HEI."*

However, a survey comment from one HEI described how this has reduced over the last 12 months: *"Covid has reduced use of patients and clinical staff (not our choice)."*

Wrong career choice, as a reason for attrition, is further complicated by recruiting through clearing, which has affected all HEIs in the past three years. Students admitted through clearing will not have had the opportunity for a clinical visit and are unlikely to get this before commencing on a training programme.

The survey provided insight into the reasons why students feel they have chosen the wrong career, which often results in attrition in Year 1, such as:

"RT is too demanding (physically and mentally)"

"Students' unrealistic expectation of the course such as amount of study time and lectures required from them"

"Clinical placement realities – the job is not what they expected"

University open days, clinical department open days, further education and school career events, and development of recruitment materials scored highly with both HEI and HCP respondents when asked about recruitment activities.

During the COVID-19 pandemic, 60% of HEIs (n=6) supplemented clinical visits with online resources for prospective students, such as:

"YouTube videos and narrated PowerPoints"

"A virtual tour of an RT department and enhanced recruitment information with presentations voiced over/ clips embedded"

"FAQ sheets; released video resources; provided links to 'I See the Difference' campaign"

This was supported by some HCPs:

"Online virtual 'live chats' are available which are run by the trust. A therapy radiographer would attend and give a presentation/chat about their career choice and information about the role of a therapy radiographer to prospective students"

"We have developed a virtual headset tour to use in schools"

Despite these interventions, 40% of HEIs (n=4) were not able to provide any supplementary information or guidance. The impact of this, on top of already high rates of attrition, including wrong career choice, could have a significant impact on rates of attrition over the next few years.

Recommendation 5: Buddy schemes

"HEIs should review, in partnership with their students, the institution's approach to buddy schemes for healthcare students."

Positively, both HEIs and HCPs had buddy schemes in place for students (n=7 and n=28 respectively). Survey and focus group results found many departments offering some form of 'peer mentoring' as well as buddy schemes. However, this was generally informal, with no specific guidance or structure to the relationship.

"So we have a student liaison team mentor who is buddied up with the students and we try to keep that person the same for the three years and then we also have a 3rd year who is buddied up with the 1st years as well." (Focus group member)

"1st years have both a 2nd and 3rd year buddy." (HEI respondent)

"They are often placed with higher year students to support and guide them as they train. This not only benefits the year 1 students as well as the year 3 students as they learn mentorship skills." (HCP respondent)

"The buddy system seems to work quite well. The students also have a mentor but the buddy is there more if they just want to go and have a chat, have any concerns or want to ask a daft question and do not want to look silly in front of anybody else." (Focus group member)

Only one formalised scheme was described by a focus group member and followed up with documentation:

"There is a scheme at X called 'mums and dads'. So students are buddied up with students from other programmes to widen their connections." (Focus group member)

58% of HCPs (n=27) and 40% of HEIs (n=4) stated that increasing numbers of students in some areas had enabled an increase in student capacity to support such schemes. However, the logistics of being able to place 'buddied' students in the department at the same time could prove difficult and depended on departmental preferences around placement of more than one student in each area.

Several managers reported feeling that students got reduced experiences if they were placed with another student. However, interview and focus group discussions highlighted the potential benefits as a development opportunity for the 3rd year students. The conclusion was that if the situation did occur, it should be used as a positive experience that would also take the pressure away from the treatment staff if managed effectively.

Recommendation 6: Year 2 students

"HEIs and HCPs should work together to develop specific programmes of support for second year students."

A range of support services were described by both HEI and HCP respondents as being available to all students, including: tutors, university support systems, specific ethnic minority group support services, student union, chaplaincy and IT support.

87% of HCP respondents (n=39) said that students were given a named clinical contact during placement, and 40% engaged daily and 40% weekly. Additionally, during clinical placement, 40% to 60% of students had weekly contact with their academic tutor.

HEE's 2018 RePAIR report documented that 48% of Year 2 students had considered leaving their programme due to greater academic demands, non-standardised clinical experience and the lack of support compared to Years 1 and 3. It was found that none of the case study sites had considered providing specific support to this group of students.

Positively, since the initial RePAIR report, 30% of HEIs (n=3) and 20% of HCPs (n=9) had added in extra support for Year 2 students, such as:

"Additional tutorials/teams meetings/supervision as it is the most demanding year." (HEI respondent)

"We have used machines out of hours to facilitate their learning plus increased the PE support, meeting with them more regularly." (HCP respondent)

"We set weekly questions for the students to investigate, these are questions from previous Band 5 interviews. This not only gives them the opportunity to learn but to also to prepare for interviews the following year." (HCP respondent)

"They have received additional sessions away from patients on a LINAC [linear accelerator] to practise their set-up skills." (HCP respondent)

However, when a cohort of current 2nd and 3rd year students from multiple HEIs were surveyed, they felt Year 1 or 2 was still the most likely point at which students would leave the course.

Follow-up data suggests that extra Year 2 support is happening in some departments, but it is very informal, often tagged onto extra support for all students or as an individual support package based on the needs of each student.

As highlighted within the focus group, student support was seen as one of the key factors that influence student satisfaction and retention:

"I think the main issue is there needs to be a standardised model of support for students and knowing their role in practice across departments would be quite good. Even from my experience as a student rotating to different departments and the way we work with students now, expectations in different departments, if they become different it puts the student off." (Focus group member)

A focus group member described the use of student focus groups as one of their mechanisms for support: *"We usually have two Band 5s who are relatively newly qualified, so they are two years in. So that is very close to the programme or close to being a student. They run these focus groups and it is really about the students having direct access to someone they feel able to open up to, who is not appraising them, who has not got the power over them passing or not passing."*

"We ask direct questions such as, 'What is good about your placement? What is bad? What can be improved?'. Even harder questions like 'Have you experienced any bullying or harassment on placement?'" (Focus group member)

Recommendation 7: Placement allocation and associated costs

"HEIs should work more closely with their HCP partners and map out detailed placement allocations for all the students, throughout the duration of their course. They should also review processes relating to placement costs and ensure students are reimbursed in an efficient and timely way."

Placement allocation and costs

Collaboration between HEIs and their linked HCPs in relation to the placement rota of students was found to be good. They often worked together and, in the less formal situations, a discussion always occurred.

"We work in close collaboration with our local HEI to ensure students are allocated placements to facilitate learning and clinical objectives. This ensures the student feels fully supported in their learning journey. We also have a student competency matrix to track student competencies so we can identify placement needs for each clinical block. The feedback from students has been very positive and the levels of achievement so far have been very impressive." (HCP respondent)

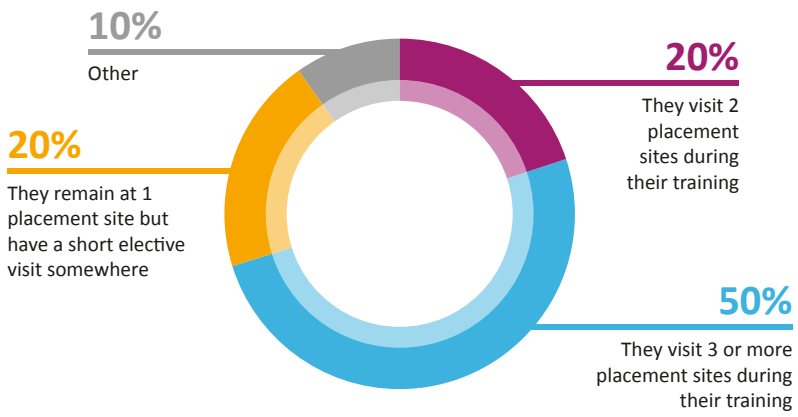
There are a variety of methods and variations in time frames used to inform students of clinical rotas (Figure 3): 37% at the start of the academic year (n=17), 15% six months before (n=7), 22% three months before (n=10) and 26% less than three months before (n=12).

Arranging accommodation was done by students alone 30% of the time, HEIs alone 10% of the time, and in 60% of cases it was a combined effort. Student feedback did not show placement allocation as a major concern when they were asked to rank their top three RePAIR recommendations in terms of personal priority. Placement allocation was chosen by 20% (n=4) and funding support chosen by 55% (n=11). All HEIs (n=10) reported informing students about mechanisms for reclaiming placement costs through lectures prior to placements and via other mechanisms, such as university websites and virtual learning platforms. 70% of HCPs (n=32) felt comfortable signposting students to this information, so the majority of students were well informed. There were still 30% of HCPs (n= 14) that did not feel comfortable signposting to these resources. There was no suggestion of regional trends.

Figure 3: HCP student placement rota allocation

Interestingly, the number of placement sites that students visit during their training varied significantly between HEIs (Figure 4).

Figure 4: Number of clinical placement sites experienced by students



Half of all HEIs used a model of rotational placement sites, stating benefits such as experience of variation in department size, techniques, and working with different staff, as explained by focus group members:

"... the three placements can be a strong selling point for a programme in that they get a variation. Often if they go to one placement and they thought they had to go back to the same placement for year two and three, I think we would have withdrawals because if they are not enjoying their first placement then they are not going to have that variety in year two or three. But it is about a big department, a small department; they get exposure to everything. They get a variety of radiotherapy, they get the bread and butter of radiotherapy so they get the whole experience and then they can choose where they want to go."

However, some participants felt that there were challenges with this model, stating that sometimes students can feel they are not always part of the team, and find the need to learn different departments' ways of working can detract from their clinical learning competencies.

20% of HEIs (n=2) stated that students visit two placement sites, and a further 20% (n=2) stated that students have a fixed placement site with a short elective visit elsewhere. Benefits of this method outlined by HEIs included the student becoming part of the team, having a fixed clinical mentor throughout, and their development being monitored by the same practice educator/clinical tutor. However, some participants felt that this was a negative approach, and that if students only had one placement then they might only experience one way of working and one manufacturer of equipment, which might not prepare them for working in a different department post-qualification. Also, if a student had a negative placement experience, it could be more challenging to resolve this if the student was training at a single centre.

These views are reflected in the following comments:

"Multiple placement sites would have improved my experience." (Student feedback)

"Just wanted to add a bit as our students do all of their training with us which is great for building relationships and confidence but not sure about preparation for working life in another department." (Focus group member)

Recommendation 8: National model for support in practice

"HEE should work with HCPs and HEIs to ensure that its national strategy, to support students in clinical practice and their supervisors/mentors, is implemented."

General student support

Positively, a number of roles were identified by both HEIs and HCPs for general student support while in clinical practice (see Figure 5 and Figure 6).

The distributions are similar, showing broad agreement between HEIs and HCPs as to the support available to students. Other support mechanisms highlighted included the department manager, which was noted by several departments. Interestingly, within general student support, buddy or peer support was noted by 50% of HEIs (n=5) and HCPs (n=23) and this correlates with results seen in Recommendation 5.

Student wellbeing support

In terms of wellbeing support, Figure 7 shows 78% of HCPs (n=36) said students could access a practice educator, 60% a mentor (n=27) , and 70% (n=32) any staff member they felt comfortable talking to and university services. Academic tutor was cited by 32% (n=15), and only 28% (n=13) suggested buddy or peer

Figure 5: Student support roles - HCP response

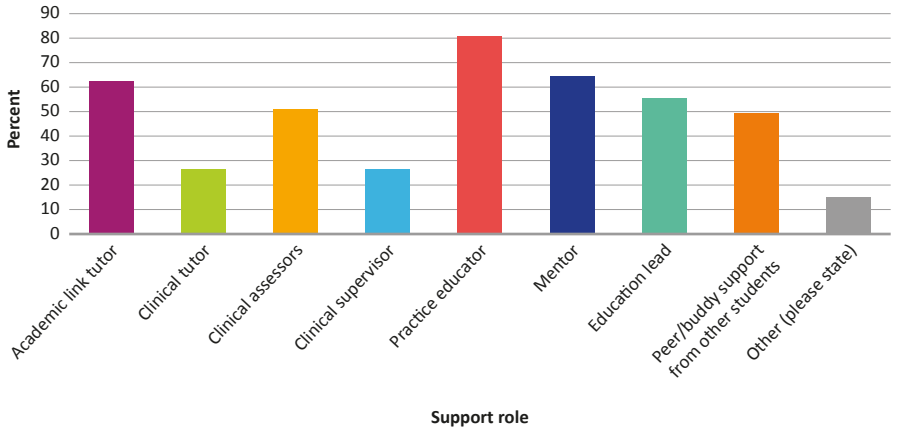


Figure 6: Student support roles - HEI response

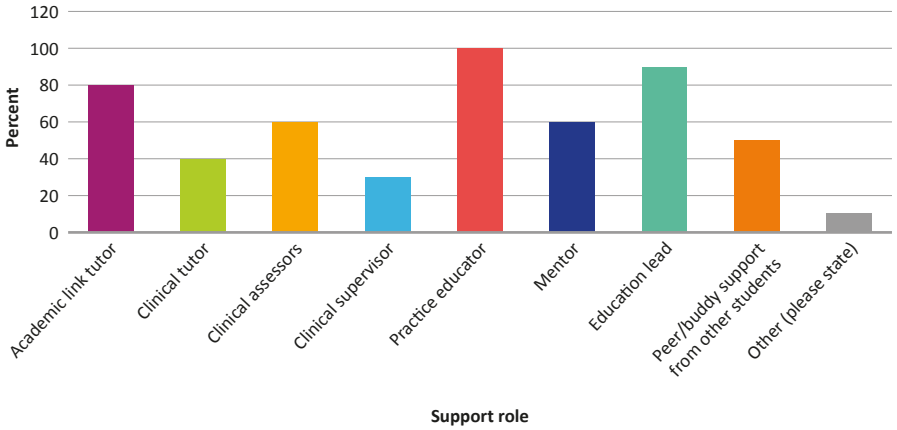
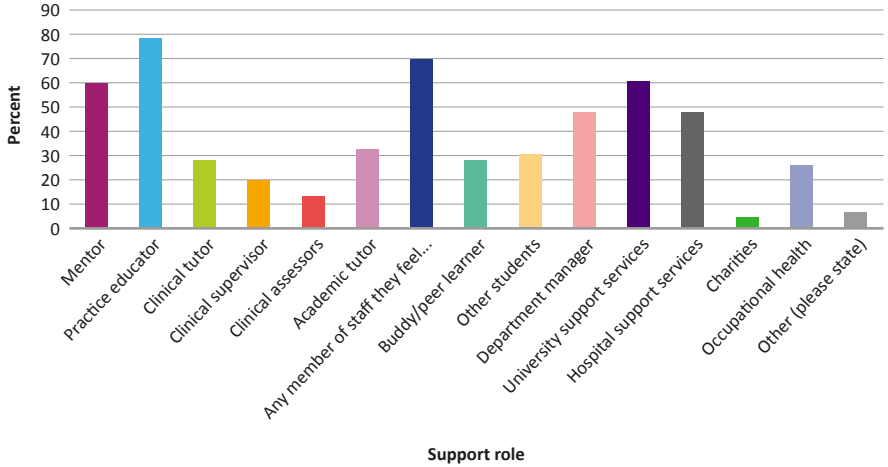


Figure 7: Student contact for wellbeing support – HCP response



learning, suggesting that the role of peer wellbeing support has not been fully explored or realised within the clinical setting.

However, one comment from an HCP summed up nicely where collaborative support mechanisms have worked really well:

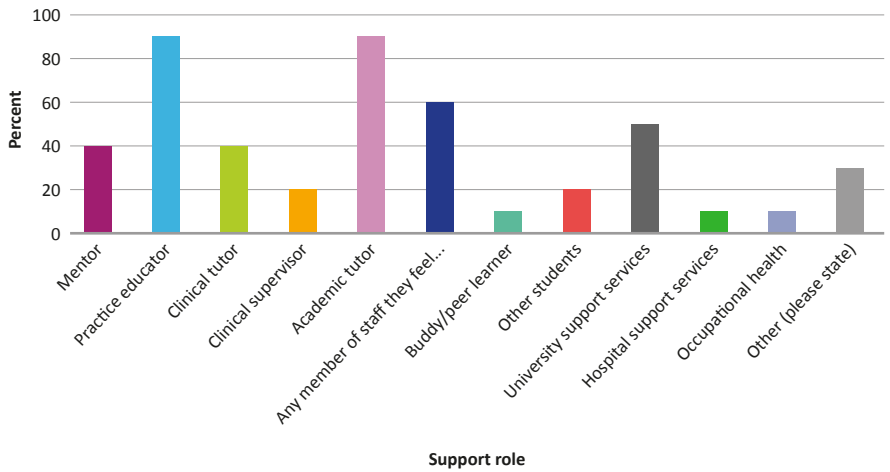
"We have an open supportive environment for staff and students. We encourage any individual to speak to anyone they feel comfortable discussing their issues with. We would then support the individual towards their line manager or practice educator to confidentially discuss any pastoral care they may need. We have adjusted clinical hours and working days to help students with personal needs. We have also worked with the universities to provide counselling as required."

Within the academic setting (see Figure 8) a greater emphasis was placed on the support availability of the academic tutor (90% n=9) and practice educator (90% n=9). Buddy and peer learning scored 10% (n=1), in line with the lower score given by the HCP respondents, suggesting buddy/peer support mechanisms could be utilised further here as well.

Assessing student competency

This was predominantly undertaken by practice educators (70% n=32), although "any staff who've worked with the student" and clinical supervisors (54% n=25 and 52% n=24 respectively) were also involved in student assessment. There was a broad correlation between results for both HEIs and HCPs. The majority of HEI staff undertook university in-house training to be able to assess student competency (89% n=41), with only 9% (n=4) indicating that they had been accredited through the CoR PEAS. 80% of HEIs (n=8) indicated that competency was maintained by university in-house training. 80% of HCP staff (undertook either in-house training updates (19% n=9)) or university in-house training updates (61% n=28)). However, no formal review of competency was undertaken by 9% of HCPs (n=4).

Figure 8: Student contact for wellbeing support – HEI response



Recommendation 9: Clarity of student's role in practice

"HCPs and HEIs should work together to resolve the dissonance that exists concerning some students' understanding of their role in the service and the interpretation of students' supernumerary status, particularly for third year students."

20% of students surveyed (n=4) said that the role of students in clinical practice ranked in their top three most important recommendations. Similar comments regarding placements and the role of the student were made during discussion when asked what they enjoyed least or would like to change about their placement. "Teamwork" was a common answer when asked what they enjoyed most.

Clarity of students' role in practice is linked to student confidence levels and was cited by half the students surveyed as being in their top three most important recommendations. Students talked about *"feeling in limbo"* and *"being overwhelmed"* approaching the transition from the 3rd year into their first qualified role.

One method of consolidating the role of the final year student awaiting HCPC registration is to employ them as Assistant Practitioners (Band 4). Figure 9. shows that 48% (n=22) of HCPs employ students as Assistant Practitioners (Band 4) prior to qualification.

Those departments that do employ students as Assistant Practitioners (Band 4) prior to qualification stated this had benefits, such as: *"You can then get them joining the rota as fully fledged Band 5s as soon as their HCPC has come through rather than only starting their induction then."*

Figure 9: Percentage of HCPs that employ students as Assistant Practitioners (Band 4) prior to qualification

Recommendation 10: Standardised clinical assessment

"HEIs should work together to agree on a national standardised approach to assessing students' clinical competence, including a simple process of recording students' prior clinical experience."

Interestingly, 80% of HEIs (n=8) and 96% of HCPs (n=44) would be interested in a national competency framework for standardised assessments. 100% of students surveyed (n=20) also said they would be in favour of standardisation. Some of the qualitative comments included the following.

"This would ensure competence is demonstrated to a national standard and that radiographers are assessing appropriately. There is too much disparity in the way radiographers assess in practice." (HEI respondent)

"I feel the student experience should be standardised to ensure our level of competence remains effective. This will help keep our skills and gain respect as a profession." (HCP respondent)

"I am satisfied with the way that we assess and develop our students here at our centre, but I am fully aware that some students elsewhere do not get the high level of support that we give. So I think this is a very important area to look into and a national approach would be the ideal, though probably difficult to put into practice." (HCP respondent)

"It's very complex as it has to fit with university assessment guidelines, which vary. However what I would say is that there needs to be consistency across what skills a graduate should have training in e.g. we do the theory and simulation of image review but some clinical sites won't allow students to review images and gain experience. Inequity in clinical experiences is hard to manage from academic. If there was a standardised framework it would be helpful." (HEI respondent)

"A standardised assessment because certain areas do different assessments so this could certainly help because when they qualify they have the same level of experience to keep them in after they qualify." (Focus group member)

"If we had national placement documentation then one of the student's placements might be able to be carried out local to their home irrespective of HEI they are attending." (Focus group member)

The few responses not in favour of standardisation included comments that:

"It is better to be department specific." (HCP respondent)

"Wide scale generic assessments are notoriously difficult to manage to ensure effectiveness and parity." (HEI respondent)

"Some elements can be standardised but given the variety of techniques, equipment etc. in departments there should be the ability to add some local standards as well." (HEI respondent)

The following statement from a focus group member summed up some of the challenges with different placement experiences and future employment:

"Particularly when you are interviewing for a Band 5 post, what some students are and are not allowed to do during their placements is huge depending on where they are learning. Some are getting opportunities to do a lot more than others and that certainly comes out when you are interviewing and to be honest that can be a detriment to that poor student who is trying to get a job and the ones that are not allowed to do stuff because wherever their placement is has decided that is not something students can do." (Focus group member)

Within the focus group, there was a discussion in the Microsoft Teams chat function suggesting that standardised assessment documentation might help with placement capacity and also might allow students to have a placement local to home irrespective of the HEI they attend.

Recommendation 11: Levels of student confidence

"HEIs should develop a clearer understanding of factors that affect student confidence levels, particularly at the point of progressing from student to newly qualified practitioner."

There are a number of factors that impact student confidence levels. The highest scoring factors from HCPs (Figure 10) were relationships with clinical staff and academic staff, the amount of time students have had off placement, and mental wellbeing. Similar results were noted from HEIs (Figure 11), although the overall scores were lower. This could indicate that HEIs are not as aware of the impact of different factors on students' confidence at the point of qualification (within the clinic setting) compared with HCPs, this could relate to the timing of the last clinical placement. However, it is clear that staff relationships and mental health support are key contributing factors.

When asked what had an impact on student confidence levels at the point of qualification, comments included:

"Continued support and encouragement of supervising clinical staff to bolster confidence and ensure consolidation of skills and knowledge is effective." (HEI respondent)

"Fear of mistakes, getting in the way, forgetting things, treating a patient incorrectly or not recognising an error." (HEI respondent)

Figure 10: Factors affecting student confidence levels – HCP response

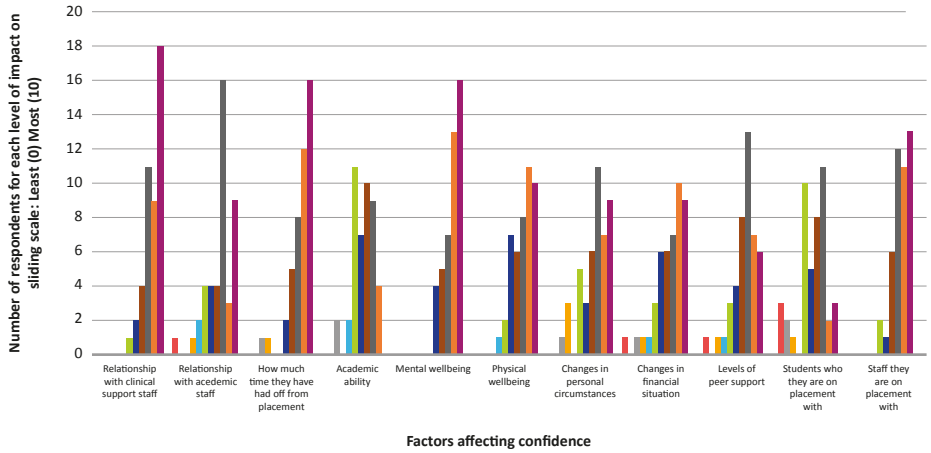
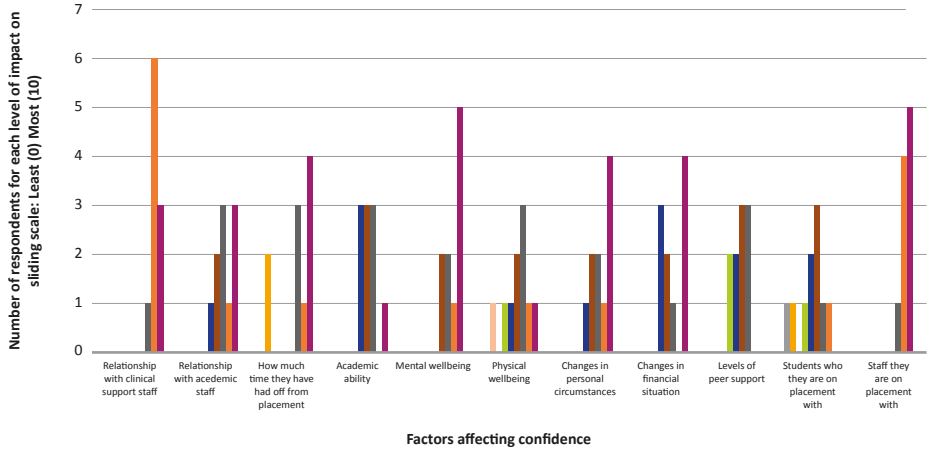


Figure 11: Factors affecting student confidence levels – HEI response



'Clinical' was the most used word in the responses from both HEIs and HCPs, as seen in the word clouds in Figure 12 and Figure 13. This highlights the importance of that final placement in the confidence levels of students crossing the 'flaky bridge'. As one HEI respondent put it: *"Being provided with opportunity to work at the level of a Band 5 … confidence ramps up enormously when the 'rads' [radiographers] let the students free to fly."*

The HCP responses were much more task orientated than the responses from the HEIs, which tended to focus more on confidence and support. Some HCPs recognised this in the following comments:

"Pressure on themselves to demonstrate they are working as a Band 5 radiographer. Staff expectations and 'encouragement' to apply for jobs. Students often find this overwhelming and have too many other things to think about such as dissertations, workload and clinical competencies. Staff don't consider the personal issues the students may be experiencing and the impact that is having on their confidence. Staff think they are being supportive but can be detrimental to the students' concentration and confidence." (HCP respondent)

"Ability to relate academic learning to clinical practice Increased levels of autonomy Demonstrating appropriate skill set." (HCP respondent)

"The interaction between clinical staff not only with the student but with one another has a huge impact on the student. If clinical staff are demoralised it affects the student. To increase the retention of students and staff departments must identify the causes of attrition. If staff have a high level of morale students wish to work there. The skill set of newly qualified radiographers entering the workforce represents the department. We wish for students to enter the workforce as a representative of who we are and what we represent. Our aim is to create well rounded qualified radiographers who are best equipped to enter the working environment with the level of skills required to be an effective member of any team." (HCP respondent)

HCPs also indicated that the final placement can be critical for students in terms of being prepared for practice and is dependent on the student/staff relationship:

"A supportive and welcoming team makes all the difference to all students." (HCP respondent)

Students were also acutely aware of their confidence levels, and many said that they were *"worried"*, *"anxious"* or *"scared I won't be able to do the job"*. One commented that: *"I've already been labelled as that **** Covid cohort."*

However, some also said that they were excited and looking forward to the opportunity of becoming qualified practitioners and felt the pandemic had made them more resilient and adaptable.

Figure 12: Student confidence levels word cloud – HCP response

Figure 13: Student confidence levels word cloud – HEI response

Recommendation 12: Preceptorship as an aid to retention

"HCPs should review their preceptorship programmes, ideally in partnership with HEIs, to improve recruitment and retention of their newly qualified staff and ensure the preceptors are appropriately trained."

78% of HCPs (n=36) have a preceptorship programme in place (Figure 14).

The duration of most programmes was between six and 12 months (Figure 15). Discussion with students highlighted that they would like a standardised preceptorship programme; they felt this would reduce anxiety about the transition from student to qualified member of staff and increase their confidence levels. This was also evidenced by one HCP respondent, who stated: *"Lack of a clear national preceptorship programme brings uncertainty."*

Most preceptorship programmes were task focused (77%) and most preceptees rotated through all areas of the radiotherapy department, although there was no indication that they spent time in other areas of the hospital, such as patient clinics, theatre, oncology wards or hospice.

"We aim to provide an experience in all areas before they start to gain competencies, this can depend on the number of new starters at one time!" (HCP respondent)

Several HCPs indicated that new staff undertook a dedicated trust preceptorship programme, as shown by these comments:

"Our preceptorship programme is based on the DoH national preceptorship framework [2010 Department of Health framework] and focuses on work skills not clinical competencies." (HCP respondent)

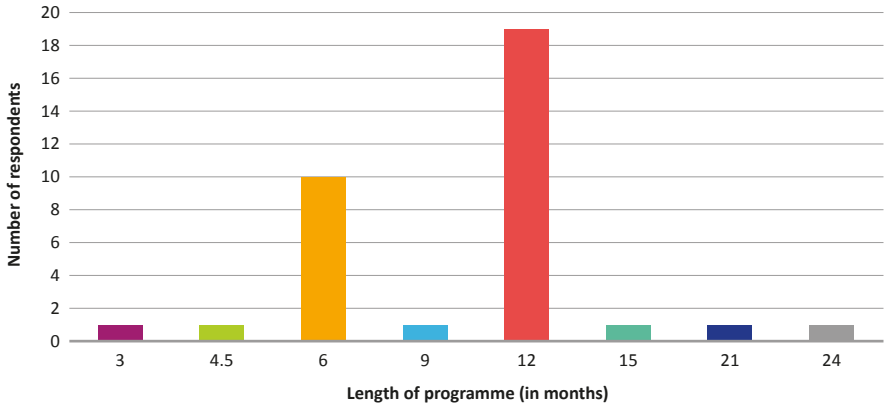
"All areas, a mixture of competency and also learning about how the service overall operates. They attend a trust programme for new graduates which helps their understanding of the whole organisation and are given dedicated time to do this. They also complete a small service improvement project and as far as possible we try to implement changes that are appropriate and have benefit." (HCP respondent)

"The trust preceptorship programme has group learning sessions with other AHP groups on various subjects e.g. Personal Effectiveness, Leading for Quality Improvement." (HCP respondent)

Only 16% (n=6) said their preceptorship programme had been designed in conjunction with a HEI.

Figure 14: Percentage of preceptorship programmes

Figure 15: Length of preceptorship programmes



Recommendation 13: Recruitment of newly qualified practitioners

"Neighbouring HCPs should work together, and with their local education providers, to agree a shared model of recruiting newly qualified practitioners."

Figure 16 shows that only 9% of HCPs (n=4) indicated they had a shared module of recruitment with their ODN. It is likely that the way in which recruitment occurs has changed since the RePAIR project was commissioned, with many departments recruiting throughout the year, not just at peak times (early spring) and using NHS Jobs to advertise. Therefore, a shared model may no longer be applicable. 80% of HEIs (n=8) said they were always informed of Band 5 vacancies and the remaining 20% (n=2) were sometimes informed. In contrast, only 58% of HCPs (n=27) said that they informed their local HEIs. One comment was that jobs were advertised nationally on NHS Jobs for fairness, so the discrepancy could be because HEIs were informed via all routes, including direct from HCPs and NHS Jobs, and word of mouth.

Over 70% of HEIs (n=7) liaised with their local HCP on recruitment activities. This mainly included job fairs at the university but also some preparation from managers and help with interview practice:

"Final year prep for practice module invites managers to come and talk to students and talk about their departments. Promotion of recruitment fairs." (HEI respondent)

Figure 16: Shared model of recruitment across Operational Delivery Networks (ODNs)

Recommendation 14: Impact of culture of care and support for students and staff in clinical practice

"HCPs should gather data about the culture of care in the clinical environments, in which the students are training, to understand the impact of that culture on the students and their early career decisions."

The Culture of Care Barometer (7), a tool produced by King's College London in 2015 for NHS England, was not known to, or implemented by, the majority of HCPs (96% n=44) and HEIs (70% n=7)). Those HEIs that taught the 'culture of care' indicated that this was mainly done in academic modules. No further information was supplied as to how this was implemented or taught. This could indicate that it was either not being covered or was being covered under the umbrella of a different term or tool used, as indicated by this comment:

"We use a similar tool but not this one." (HCP respondent)

When asked to rank their top three RePAIR recommendations in order of importance to them, several students highlighted culture of care as being the most important.

Other support mechanisms

HCPs and HEIs were asked about the support mechanisms in place for students to aid their transition from student to qualified practitioner and (newly) qualified staff in their early careers.

HCP response

It is clear that a number of support mechanisms exist, as indicated by the following statements from HCPs. Many of these are centred around the preceptorship programme. Some of them are also available to students.

"Health and wellbeing services provided by the trust. RT services manager having an open-door policy." (HCP respondent)

"Wellbeing activities across the trust preceptorship offers multidisciplinary work so staff get to interact with other professions. Mentor and buddy system put into place with regular 1:1s which include mental health and wellbeing highlighted." (HCP respondent)

"The trust has a Flourish initiative dedicated to looking after the wellbeing of all staff. This is signposted to new staff during their corporate staff induction. Resources and links on trust website. All new radiotherapy staff are given regular reviews during their preceptorship four, eight and 12-week reviews. The department are currently looking at employing Clinical Supervision sessions for staff with a focus on newly qualified staff." (HCP respondent)

"We have health and wellbeing representatives within the department. They are trained to facilitate the emotional health and wellbeing for staff and the services available. They also promote morale boosting activities to ensure staff work as a team to support one another. This has been invaluable during Covid. Staff induction processes have become more interactive, individualised and robust. Learning opportunities and inductee lead. We have a basic level of training we offer to staff as a standard but we also facilitate additional training if requested. This process is non-punitive. All competencies are scanned and recorded as an evidence-based process and recorded electronically in real time. This helps PE [practice educator] staff to identify progress and training needs. Staff are reviewed regularly by their line manager and PE team to ensure their progress is on track. If the progress is slower than anticipated, we focus solely on enabling learning not as a

performance review. We understand individuals learn at different rates. We also facilitate different learning styles through protocols and training videos. The feedback from this has been incredibly positive. Staff are allocated a buddy /mentor to enable sharing of experience and learning. This is a non-parental role to enable the member of staff to feel welcome and supported. CPD is very much encouraged. The PE team are happy to identify any in-house or external courses to help staff develop within their roles or progress to new roles." (HCP respondent)

"Newly qualified radiographers like all staff have access to the staff wellbeing service, the chaplaincy, the complementary services, occupational health, clinical supervision, coaching services, mentorship, educational training, leadership training opportunities and resilience training." (HCP respondent)

HEI response

All HEIs indicated that they prepare students for professional practice in some way. Most HEIs indicated that this was covered within academic modules around preparation for practice/transition to qualified practice. They typically included interview preparation and technique and completing application forms etc. Some other examples included:

"Interview practice, CV and personal statement support at programme level and as HEI with careers consultants, 1:1 sessions, PS [personal statement] in portfolio assessment that is graded, employability support from year 1, HEAR [higher education achievement report] offer." (HEI respondent)

"Many ways!! For example: A wide variety of clinical placements. Ensuring professionalism is maintained. Clear linkage to stakeholder requirements as professionals. Ethical discussions. Viva examinations to test depth, breadth and security of knowledge. Clinical assessments aligned with qualified requirements." (HEI respondent)

Recommendation 15: Application of RePAIR to the new models of pre-registration education and training

"HEE should seek to understand the relevance of the findings of RePAIR to the new models of pre-registration education and training that are being implemented in health and social care."

When asked how COVID-19 had impacted on the way students were trained, 50% of HCPs (n=23) indicated it had had a significant impact whereas the other 50% (n=23) indicated little or no impact, other than the fact that all students were removed from placement at the start of the pandemic. When students were asked a similar question on the CPEP study days, 83% (n=17) said their clinical placements experience had been excellent or good in the last 12 months but 64% (n=13) felt their academic experience was average.

When asked to expand on the impact COVID-19 had on the training of students, comments from HCP included:

"The training was delayed for a number of months and social distancing has impacted on some training opportunities." (HCP respondent)

"Reduced activity in department, therefore reduced patient exposure/clinical experience – meeting the bare minimum." (HCP respondent)

"The gaps in training have had a negative impact and we are trying to catch up with the clinical learning. Particular problems with other allied services placements and risk assessments have limited what some students can participate in." (HCP respondent)

"We have a risk assessment in place now to only allow one student in a treatment area at a time. Usually there would be two students, sometimes three in a treatment area pre-COVID so this has meant that there is a reduction of clinical hours for them. Instead of 30 hours clinical time they are having 24 hours each week, with the six hours extra study time off site." (HCP respondent)

"Covid has impacted our students greatly. Educational placements have been conducted online meaning the student cohort have not developed the interpersonal relationships they would normally have at university. This has reduced their level of support they can offer one another. The students also haven't the ability to develop a rapport with university lecturers the same as well. We have identified self-directed learning has been rather hit and miss as they aren't monitored on their progress in the same way. Clinically, some students have missed nearly 12 months of placements, yet the levels of competence have not been adjusted to enable students to feel supported. The levels of stress of students, especially year 2 students, has been incredibly high. This has posed challenges for clinical staff already working during a pandemic. This has added an extra element of stress onto everyone concerned." (HEI respondent)

Other comments from those who did not consider student's training had been affected included:

"Our students are part of the team, unless they have been unable to attend the department, they are keeping up their clinical placements. PPE [personal protective equipment] causes its own issues." (HCP respondent)

"Has not impacted, apart from PPE." (HCP respondent)

"We see students as a member of our team and recognise the importance of continuing to develop the future workforce during the pandemic." (HCP respondent)

90% of HEIs (n=9) indicated that COVID-19 had an impact on their student training programme. This was mainly teaching and assessments moving from face-to-face to online. Clinical practice assessments moved to a more competency-based testing rather than being based on the number of weeks undertaken in clinical practice.

Comments from HEI respondents on the impact of COVID-19 on radiotherapy training programmes included:

"It has considerably reduced the face-to-face teaching, which has limited the students' interaction and also then impacted on the attendance to practical session. We saw almost a 50% drop. There was less opportunity for effective team working and student interaction, which caused anxiety amongst some students." (HEI respondent)

"Academic learning has largely been online but practical skill development has been face to face on campus. Clinical training has reduced the range of placement sites students have been able to visit. Some clinical training weeks have been lost and a reliance on competency-based testing has increased with a reduction on the requirement of a set number of weeks experience." (HEI respondent)

"New ways of working via remote e-learning reduction in access to skills and VERT [virtual radiation therapy treatment room] modification of assessment (move to online)." (HEI respondent)

Within the focus group, a range of different actions were taken to support students through the pandemic. Comments included:

"One of the other things that we did because of Covid-19 was, we created an online resource for the students as a preparation for practice." (Focus group member)

All respondents described the induction of newly qualified staff as being largely unaffected other than induction programmes moving to an online format. However, comments around social activities and reduced footfall in break rooms suggested an impact on confidence levels, perceived levels of peer support and mental health.

Have you used simulation in the clinical training of students?

100% of HEIs (n=10) and 59% of HCPs (n=27) had used simulation in the training of students. The type of simulation activities from HCPs included those in Figure 17.

Figure 17: HCP simulation activities

The range of simulation used at HEIs included those in Figure 18.

The virtual radiotherapy treatment room system VERT (28) was the most widely used simulation tool for both HEIs and HCPs. Most HEIs also had use of a planning suite. Approximately 10% of all simulation activities involved service users/role play activities. VERT and planning suites were also highlighted by students as the most common forms of simulation. Figure 19 shows the range of simulation activities undertaken by students.

When asked what percentage of clinical placement they envisaged being replaceable by simulation, the average figure given by HEIs was 18.9% and by HCPs was 23.5%, and 13% by students, although a third of students felt it could be as high as 20%. Average percentage of total time that could be replaced by simulation across HEIs, HCPs and students was 18.9% (Figure 20).

Figure 18: HEI simulation activities

Figure 19: Student simulation activities

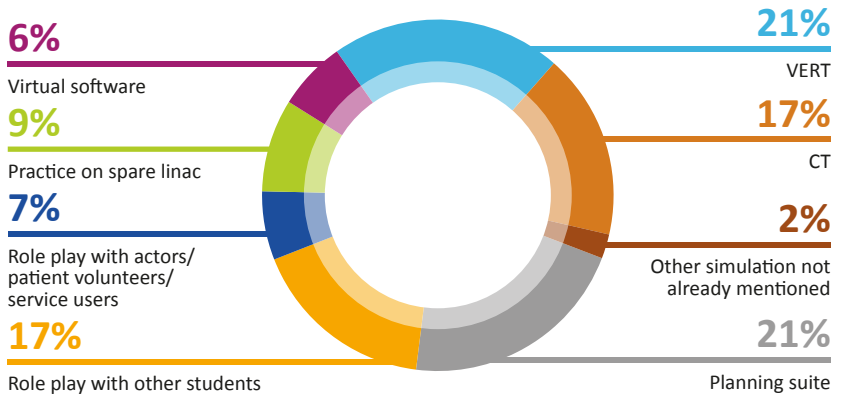
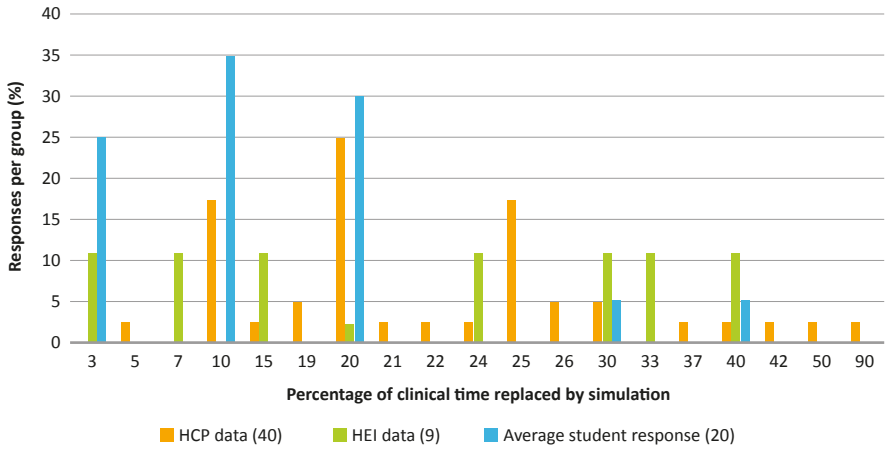


Figure 20: Percentage of clinical time deemed replaceable by simulation



When HEIs were asked their opinion on the role of simulation, some comments were positive about its role:

"We are doing some of the students' assessments on VERT and can see that there is a huge scope to increase clinical learning in a simulated environment." (HEI respondent)

However, other comments indicated HEIs did not see the benefit of the role of simulation or were nervous about its use to replace clinical practice:

"It's not all that! Simulation is often seen as gimmicky by students. It's been used for preparation of first year students but has no real worth in training of more senior students (and they resent its use)." (HEI respondent)

"We are nervous of using simulation instead of clinical due to the ability to truly replicate the environment. Simulation is expensive to implement in HEIs and requires a lot of organisation and staffing. As a result, you must commit to it and ensure full commitment by everyone involved. Simulation should be used to complement clinical and not replace it, unless warranted due to capacity issues. Depending on the type of simulation there is an additional training need required by academics and clinical staff to ensure high quality." (HEI respondent)

Awareness of local initiatives to meet RePAIR recommendations

Only 30% of HEIs (n=3) and 20% of HCPs (n=9) indicated that they were aware of any RePAIR initiatives that had been employed locally.

"I don't think there was enough promotion of RePAIR and the recommendations within radiotherapy. It needed more engagement from HEIs and clinical partners. Implementing the recommendations calls for partnership working and engagement from students, HEI bosses, clinical managers etc. Without all working together it is difficult to implement." (HEI respondent)

Those that indicated that they had awareness of RePAIR had been involved in the initial project or were currently employed by HEE in RePAIR roles.

One HEI indicated they had looked at *"standardisation of attrition indicators, hardship funds, improvement of student role understanding, improvement of student confidence/resilience"*. (HEI respondent)

"I heard about RePAIR at a managers' meeting. Someone came and did a presentation about it. I am always interested in making sure we keep our students because they are the next lot of our workforce and if we do not have them we are going to struggle to recruit any post that is vacant. So it is important that we try and make sure we get the right people in." (Focus group member)

"HEE have employed HEE RePAIR staff to work within regions to support departments to implement the changes." (HCP respondent)

Changes in working practice enabling increased student clinical training capacity

It was recognised that there was a need to increase student training capacity but ways to best achieve this could be challenging:

"We are struggling to meet the numbers each year so need to increase capacity currently." (HEI respondent)

A number of changes in working practices were cited by both HCPs and HEIs as ways to increase the capacity of students in training (see Figures 21 and 22).

Figure 21: Methods to increase capacity of students in clinical training – HCP response

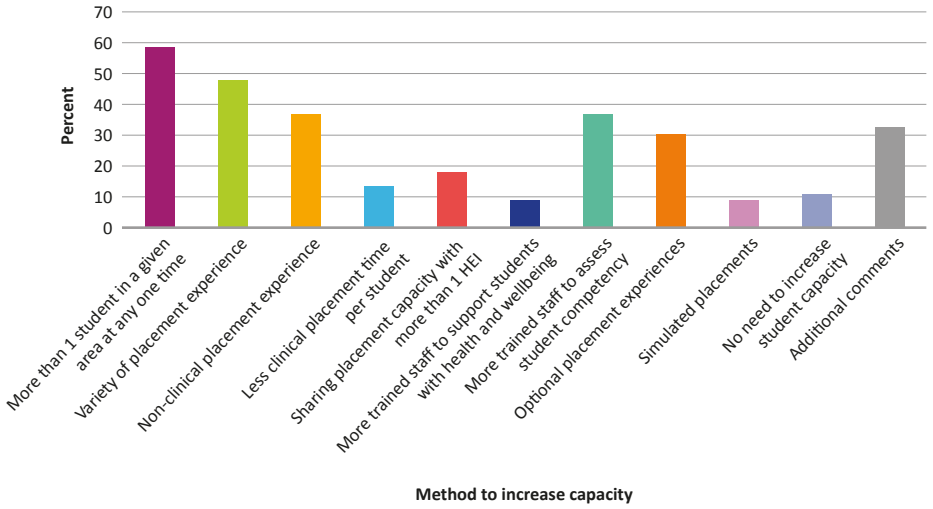
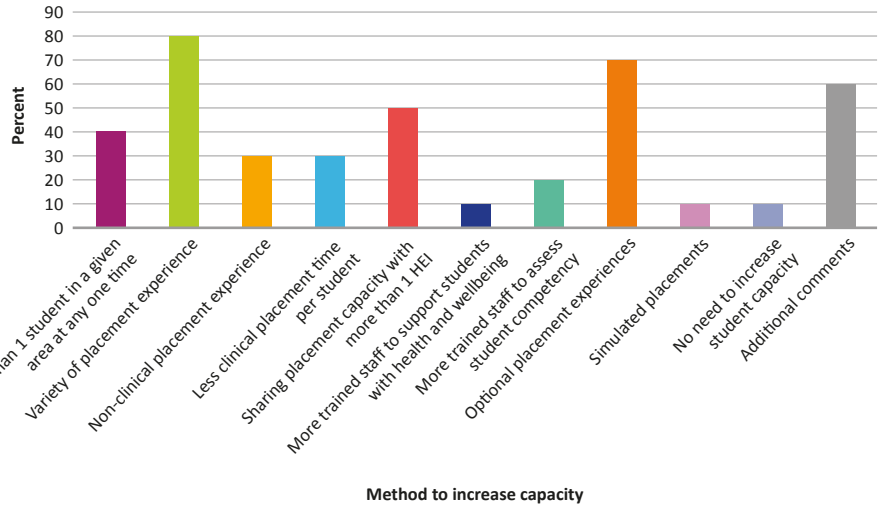


Figure 22: Methods to increase capacity of students in clinical training – HEI response



Varied placement experience scored highly among both HCPs (48% n=22) and HEIs (80% n=8) as ways to increase student capacity. Interestingly, 70% of HEIs (n=7) indicated that simulation could be a way to increase student training capacity compared to only 9% of HCPs (n=4). 58% of HCPs (n=27) indicated that having more than one student in practice at any one time could help increase capacity.

"Setting expectations about dept. extended working hours and how being flexible and working different hours can give more clinical time to an individual especially when there is overlap between year groups." (HCP respondent)

Both HCPs and HEIs recognised the importance of needing to increase student capacity, with only 10% (n=1 HEI, n=4 HCP) of respondents indicating that there was no need to increase capacity. However, it was also recognised that increasing student capacity was not without its challenges:

"We need to ensure quality not just quantity and are very mindful of this." (HEI respondent)

23% of HCPs surveyed (n=10) indicated that they had no capacity to increase student placements, with comments such as:

"No space to increase student placements." (HCP respondent)

There remains a variation in opinion on ways in which capacity can be increased and although many HCPs indicated having more than one student was a way to increase capacity, this was strongly refuted by one HEI respondent:

"We absolutely defend against the use [of] placing more than one student in a given area (esp LINAC) and deem this poor practice." (HEI respondent)

Further comments

Participants were asked to provide any further comments in relation to the survey/focus group that had not already been covered. Responses mainly included expanding on previous points made and these have been subsumed into the main findings.

Other responses were on wanting to find out more about the project and dissemination of the findings:

"Thank you for conducting this vital work. It is a pleasure to be able to contribute." (HEI respondent)

"I feel there are a lot of things we could do to draw on and share good practice and just hearing some of the things today has sort of got the brain working and thinking about that. What I have found from other initiatives like the SIHED [strategic interventions in health education disciplines] and various other things, is that the communication does not always come back, and the sharing of good practice does not always get through so that we can make the difference for all students." (Focus group member)

Discussion and future proposals

From the project findings it is evident that, of the 15 RePAIR recommendations, some are viewed as a higher priority than others by both HEIs and HCPs. There are areas of excellent practice where some of the recommendations are being met and other areas where the recommendations are not being widely met or implemented within radiotherapy practice. Future workstreams including examples of good practice will be collated into an online repository toolkit (Appendix 1) and will form the basis of a Radiography special interest group (SIG).

The following discussion explores how each of the 15 RePAIR recommendations are being met within radiotherapy education and clinical practice, with further proposals on ways to support the implementation of RePAIR including future projects.

Recommendation 1: Standardisation of indicators for attrition

There is a broad agreement on the definition of attrition among both HEIs and HCPs. It is clear that attrition figures are more formally collected by HEIs but not as routinely collected by HCPs. There is not always a clear communication channel between the HEI and HCP, especially if the reason for attrition is not directly related to clinical placement experience.

Where poor career choice is cited as one of the main reasons for attrition, HEIs and HCPs should continue to work collaboratively with professional bodies on recruitment and outreach strategies to better inform applicants of the career and the commitment required to undertake the education and training. This will be more important given the impact that COVID-19 has had on the ability for applicants to gain any radiotherapy clinical visits prior to application.

The Radiotherapy Workforce 2020 census data indicated that the largest workforce turnover was at Band 5 (19.5%). The main reasons for leaving a post were personal reasons (66%) and promotion (70%) (16). Within the findings from this RePAIR project, many HCPs indicated they did not have much early career attrition but when staff left an organisation it was mainly for reasons relating to relocation and promotion. 13% of HCPs (n=6) cited career change, as a reason given for attrition, which is comparable to the Radiotherapy Workforce census data figure of 15%. This indicates that the majority of staff are staying within the profession even if they are leaving an organisation within the first two years. If the majority of these leavers stay in the profession, then the workforce as a whole may not be significantly impacted, although regional variations in staffing numbers could still be problematic. It is those who leave the profession altogether that we should be concerned about and require further investigation.

Proposals:
• A dedicated online recruitment package, with career signposting and transparent outreach information to allow potential Therapeutic Radiography students to make informed choices about Therapeutic Radiography as a career and profession would be valuable
• HCPs to formally record any attrition and reasons for leaving
• It is recommended that HEIs and HCPs collaborate and discuss attrition data regularly and review processes to support students to remain of their programme of study, especially when attrition is related to placement experience (directly or indirectly)
• Early career signposting to the variety of roles within radiotherapy, role expansion opportunities and continuing professional development (CPD) activities. Investment in post registration education and training to complement clinical roles and careers clinics to aid retention of qualified staff and develop the four pillars of (advanced) clinical practice, which are clinical practice, leadership, management and education

Recommendation 2: Cost effectiveness of intervention

The majority of HEIs are involved in student retention initiatives such as student support schemes, mentoring, mental health first aid training, coaching and buddy schemes (see Recommendation 5). However, there is a need for HEIs to continue to work collaboratively with HCPs to support retention initiatives. This is intrinsically linked to student support mechanisms and creating a positive learning environment.

For professionals in their early career, there is some evidence of support mechanisms being linked to the preceptorship programme, but this needs to be more formalised, with regular 'check ins' on health and wellbeing. HCPs should continue to work on strategies to develop staff competencies and preparation of career promotion activities to aid retention of staff.

HCPs need to continue to be supported to develop staff retention initiatives, to help reduce the number of staff leaving the profession altogether and to prevent some of the losses to other professions, as documented in Recommendation 1.

Proposals:
• HEIs to continue to provide regular support mechanisms for students in training, to include academic and health and wellbeing, with a view to providing additional transitional support at the point of qualification
• Regular feedback and feedforward on progress from both clinical practice staff and academic staff to aid student/staff retention
• Continued development of role expansion opportunities, including CPD activities to complement clinical role and careers clinics to aid retention of qualified staff

Recommendation 3: Funding support

Financial reasons are cited by many students as reasons for leaving their training course and evidence from the survey and focus group indicated that this was still a major concern for students with many facing financial hardship throughout their training programme. This has not changed since the RePAIR report in 2018 (6). It is exacerbated when there is a delay in receiving any funding. Although students can access a 'hardship fund', this is often a short-term loan that needs to be repaid within 30 days. The term 'hardship fund' suggests financial difficulty, but it is more common for the issues to be around the timing of reimbursements or receiving loan payments rather than being in financial hardship. The term can often cause additional stress to students who are already worried and anxious about their financial situation. Changing the name of the 'hardship fund' could cause less stigma for students needing to access such payments. The impact of the introduction of the NHS Learning Support Fund in 2020 (5) now needs to be understood in terms of recruitment.

Funding support is also intrinsically linked to placement accommodation costs, and this is explored further in Recommendation 7.

Proposals:
• Consider changing the name of the hardship fund to one that causes less embarrassment/anxiety to students such as 'instant access loan'
• Ensure students can apply for any short-term loan on more than one occasion
• Increase the time needed to pay back any loan and consider repayment instalments
• Understand the impact of the NHS Learning Support Fund (5) on student recruitment from 2020 onwards

Recommendation 4: Wrong career choice

In nearly all instances, clinical staff are actively involved in the recruitment processes of students, and almost all students (pre-pandemic) were able to undertake a clinical visit as part of their application process. However, wrong career choice is still being cited as a reason for attrition, which suggests what is currently in place is not providing enough insight to allow students to make an informed career choice.

Since March 2020, few if any clinical visits for potential students have taken place. Replacement online information is only available from some HEIs, suggesting we are likely to see more applications from individuals who may not have any awareness of the role of a Therapeutic Radiographer or around the mental and physical demands of a radiotherapy training programme.

There needs to be a continued collaborative approach to recruitment and outreach activities so that students have a single point of access to recruitment material. Working in conjunction with key stakeholders, including the SoR professional officer for recruitment and outreach and students and new professionals officier, will enable a coordinated approach that will ensure a more widespread dissemination of knowledge of the role is achieved. Aiming to promote and showcase the variety of career pathways of a Therapeutic Radiographer, inspiring those interested in healthcare roles to consider Therapeutic Radiography as a career option.

Proposals:
• A dedicated online recruitment package, with career signposting and transparent outreach information to allow potential Therapeutic Radiography students to make informed choices about Therapeutic Radiography as a career and profession would be valuable
• HEIs to continue to provide course information and links to key online recruitment resources
• In order to help support potential students making the right career choice it is recommended that Radiotherapy HCPs continue to offer clinical visits (COVID-19 permitting) for prospective students

Recommendation 5: Buddy schemes

Positively, buddy schemes seemed to be in place in a number of HEIs and HCPs. An abundance of good ideas were highlighted during the survey, focus group and interviews. Most of these initiatives were informal, with no written process in place. One respondent described a formalised scheme that has been running successfully for a number of years and was able to provide written guidance on how the scheme is set up. Buddy schemes varied significantly; in some situations the buddies were fellow students and in others they were newly qualified members of staff.

Buddy schemes can be set up in collaboration between HEIs and HCPs which would enable students to be 'buddied up' with more senior students via clinical placement sites, where possible. Those set up in collaboration may be more effective, with students able to support each other throughout all aspects of the training programme. This links to placement allocation, which has its own difficulties. However, if students are buddied with someone who attends, or has attended, the same clinical placement site they are likely to be able to provide more support than to someone working on a different site. Their buddy will know the department, staff and techniques; this will maximise the impact of having a buddy scheme in place.

Formalising buddy schemes could be facilitated by increasing the number of students on placement once COVID-19 restrictions are lifted, placing a 1st year and a 3rd year together where possible, which could help both students and staff mentors as the buddy would be able to provide some of the support traditionally offered by a mentor or practice educator. The buddy would also be able to gain valuable skills in terms of peer-to-peer support, coaching and advice, which would be important graduate skills that can be transferred into qualified practice when they would be responsible for the education and training of others as set out by the HCPC code of conduct, performance and ethics. Some HEIs are beginning to develop such a scheme, broadly based on the 'collaborative learning in practice' (CLiP) model of supervision, whereby students are responsible for the coaching, mentoring and formative assessment of level 1 students (29). Originally developed in the Netherlands, the model is being widely implemented within nursing as a way to increase student placement capacity .This could also be an integral part of the Clinical Placement Expansion Programme (CPEP) within all Allied Health Professions.

In addition, some HCPs provide a qualified member of staff as a mentor for either a year group of students or individual students, and have found this to be beneficial. These mentors are not usually those involved in the assessments of the student. Mentors should be supported within these roles, potentially including mental health first aid (MHFA) training and coaching skills.

Students often find their own buddies and mentors, but a formalised system on top of this will ensure all students have the most appropriate support in place.

It is clear that there are a range of different models in existence and HEIs and HCPs should continue to work collaboratively to develop a model that works for them and the student cohort.

Proposals:
• HEIs to look to formalise the use of student buddies and provide formal written guidance detailing the scheme
• Where possible HEIs could link students by clinical placement site to provide maximum support
• HCPs and HEI's to ensure appropriate training and support is available for qualified therapeutic radiographers who are mentoring students (ideally CoR PEAS accreditation (9))

Recommendation 6: Year 2 students

Despite interventions recommended specifically for Year 2 students from the RePAIR report, recent student feedback suggests that Years 1 and 2 are still the most likely point in training for attrition. RePAIR highlights Year 2 as the critical year and those students as needing the most support; Year 2 is deemed more demanding than Year 1 due to the pressures of completing academic assignments while on clinical placement. Anecdotally, Year 2 is often described as the hardest year because this is when the most development occurs. During this year, students will often be required to master treatment techniques and associated care for all sites, while undergoing huge periods of academic learning and assessments for both clinical and academic aspects of their training.

More recent data from the 'Impact of Covid-19 on students' survey (25) found that, similarly to our radiotherapy student data, AHP students generally are still at risk of attrition in the first two years but not usually in the 3rd year. The only anomaly from the 'impact' data is that of AHP students on an extended clinical placement towards the end Year 3, around 38% had considered leaving the programme. This data is not specific to radiotherapy but reasons given by students for these concerns were *"feeling overwhelmed"*, *"high stress levels"* and, among respondents from ethnic minority groups, *"mental health concerns"*. These feelings are often common in Year 3 students but attrition is uncommon. The impact study data saw reasons for this, such as *"already invested time/money"*, *"want to finish their programme"*, *"committed to a career in healthcare" and "support from university, clinical supervisors and family"*.

It is clear that students are supported by various mechanisms, but also that this differs widely between education providers and within clinical placement sites. An example of an intervention used in the placement setting was mid-placement focus groups. The reason for initiating these focus groups was due to HEI feedback only once the placements were completed meant any issues could not be addressed at the time, and so change could not be implemented while the students were out in clinical practice. This HEI and its linked HCPs wanted to be more proactive and give themselves a chance to address any issues in real time and support the students to have a positive placement experience. It was also noted that this provides the focus group chairs (usually newly qualified practitioners) with the opportunity to learn new skills and help in their early career development. This links into step 4 of RePAIR's description of the student to newly qualified practitioner journey, their early clinical career and facilitates that radiographer in developing skills in preparation for advanced practice.

Moving forwards, there is a need to review and standardise the support available to students but also offering options to individualise support, rather than making the assumption that each student in a given year will require the same amount and type of support. By getting the support right at the beginning of the training programme, it will be embedded throughout, thereby reducing the attrition seen in both Years 1 and 2.

Proposals:
• Different roles titles are frequently used by Radiotherapy HCPs and HEIs to describe (student) support roles, it is suggested that work is led nationally to standardise titles, and to help protect time for those providing education, training and support for all learners in the workplace
• HEIs and HCPs collaborate and discuss attrition data regularly and review processes to support students together, especially when attrition is related to placement experience (directly or indirectly)
• Creation of a national support toolkit, allowing HEI's and HCP's to co-produce a repository of support mechanisms, such as buddy systems, peer support, focus groups, social media groups and 'culture of care' tools (see Appendix 1)

Recommendation 7: Placement allocation and associated costs

Placement allocation and the associated costs are intrinsically linked but caution needs to be taken to ensure they are looked at as individual issues too. Results showed good collaboration between HEIs and HCPs on placement rotas, and students were generally happy with timings of rota allocation. These results will be influenced by the number of clinical sites a student attends during their training, but in general students appear to be well informed of clinical placement allocation. The superseding issue is the timing of funding and reclaiming accommodation expenses. The main issues raised were focused on the costs associated with attending clinical placement in locations outside the area local to the HEI.

It is interesting to note that there is a wide variation in the number of placement sites a student will attend during their training course, and pros and cons cited for these both by HEIs and HCPs.

Standardisation of multiple areas within training programmes is discussed throughout the RePAIR report (6), including standardising student support and clinical assessment, and there could be potential to standardise the number of clinical placement sites.

Number of placement sites each student attends varies significantly by region. In some areas of the country students attend a clinical placement site 170 miles from the HEI; however, focus group members from the HEI say that three training sites is often a selling point for the course. Although students have to relocate for some placements, they know they are only attending once for a long placement, then they have another two placements closer to the HEI, with the added long-term benefit of experiencing three different centres. There is scope for future work on the number of placement sites, students' experiences and how placements are allocated to students.

Results demonstrated that 'finances' were often given as reasons for student stress and attrition, and so addressing the issues around reimbursement of placement costs could help in reducing finance-related attrition.

Placement allocation is also linked to Recommendation 15 on the application of RePAIR to the new models of pre-registration education and training, specifically the use of simulation and increasing student capacity on placement. Pressures on finding placements for higher numbers of students could be alleviated by increasing the use of simulation. On average stakeholders suggested that up to 20% of clinical placement time could be replaced by simulation and that there is a need for investigation into current simulation activities and how future developments can be embedded into the training of students and qualified staff. Alternative placements such as HEE placements, SCoR leadership placement, those linked to CPEP projects, and other in-house research, education or leadership placements are being currently explored and utilised. Multiple students on each placement can also offer the potential to increase student numbers; however, this is a contentious issue, with strong views for and against multiple students (30).

Positively, training students with a view to including the four pillars of advanced clinical practice, being able to mentor and provide leadership to another student while on the same placement gives good development opportunities for the more senior student. Tied in with increasing opportunities for research and leadership placements, students are potentially beginning their career with a broadened experience across the four pillars than historically, when the single focus was clinical practice. This also links to the transition into early clinical career, career progression and, ultimately, retention within the profession and NHS more widely. This aligns with the philosophy of integrated care systems (ICSs) whereby partnership working and cross-boundary working are seen as key advantages in ensuring a more joined-up system of care is provided for patients (31).

Proposals:
• Further education for HCPs about signposting students to mechanisms for reclaiming placement costs
• Further work is recommended to highlight and formally document the benefits of multiple students per placement area
• Develop 'alternative' (non-clinical/non-traditional) placements during training programmes and investigate the role of simulation

Recommendation 8: National model of support in practice

A variety of terminology is used to describe the professional groups responsible for student support. Practice educator, clinical tutor, link tutor and clinical supervisor are just a few examples that are used. The different terminology used can be confusing for students who may not know who to go to for the support they require. In a drive to standardise training as much as possible, further work to standardise the nomenclature of roles is recommended; this then links these roles clearly into formalised student support mechanisms. Similar challenges are recognised within the development of advanced clinical practice (ACP), where the different titles, types and levels of qualification, and evolution of the roles, have caused lack of understanding and confusion around the roles and their meaning. This can result in differences in the support, education and training required and can be a barrier to qualified staff undertaking such roles (32). It can also make it more difficult for those staff looking to develop their career to know and understand the roles that are available for them.

Specific year 2 support has been discussed within Recommendation 6: Year 2 support needs to be securely embedded in Year 1 of training to have the required impact on Year 2 students. To ensure there is the necessary infrastructure in place to support both students and qualified staff in their education and training, there needs to be consistency in the support approaches available and this needs to be effectively communicated to students and staff.

Support of student supervisors/mentors is also variable, and in some departments *"any staff who've worked with the student"* are also part of the student assessment process. Therefore, it is key to also support all these individuals to provide the best support and guidance to the students. The RePAIR report (6) highlighted concerns relating to the variation in levels of commitment to student learning from professionals, acknowledging the stresses of clinical working. Those taking on any role of student supervision (practice educator) should be afforded protected time on a weekly basis to be able to undertake the role.

The Radiotherapy RePAIR survey showed that very few people involved in supervising, mentoring or assessing students had formal qualifications in student assessment, although the collaboration with local HEIs was good and maintenance update sessions seemed common practice. There is a need to explore how to make CoR PEAS accreditation (9) a more attractive proposition to staff wanting to formalise the assessment of students.

Where no maintenance of competency is carried out (9% of survey responses n=4) it is recommended that HEIs and HCPs work together to ensure that those assessing the students are competent to undertake assessment and support requirements.

Proposals:
• Different roles titles are frequently used by Radiotherapy HCPs and HEIs to describe (student) support roles, it is suggested that work is led nationally to standardise titles, and to help protect time for those providing education, training and support for all learners in the workplace
• Year 2 support needs to be extended to 'student support' and mechanisms for this need to be explored with key stakeholders
• Competency of those involved in student assessment to continue to be reviewed annually, in collaboration with linked HEIs
• Those involved in student assessment to be facilitated to work towards formal CoR PEAS accreditation (9) or similar qualification
• Protected time is required to undertake student assessment and support

Recommendation 9: Clarity of students' role in practice

Students' perceptions of their role in practice, especially prior to qualification, are linked to the 'flaky bridge' transition period and student confidence levels discussed in Recommendation 11. Also, Recommendation 10 (looking at standardising clinical assessments) would align expectations of all students, regardless of the HEI and HCP, so would further address the expectation of students and their role in the team.

Employing final year students as Assistant Practitioners (Band 4) is an area that could be explored further in terms of supporting students to improve confidence and communication skills prior to gaining HCPC registration. This is recognised as a huge challenge potentially in light of the pandemic, when students have had less face-to-face exposure and limited clinical practice time. It could provide a valuable opportunity to address some of the softer but crucial graduate transferable skills. Most newly qualified Band 5 practitioners are supernumerary while they undertake their induction period, and employing them prior to their HCPC registration as Assistant Practitioners (Band 4) could also have a cost-saving advantage.

Proposals:
• Alongside Recommendations 10 and 11, aligning more aspects of clinical placement will allow for more defined roles and expectations of students, regardless of placement site
• HCP's are encouraged to explore employing students as Band 4 assistant practitioners while awaiting HCPC registration

Recommendation 10: Standardised approach to clinical assessment

The level of interest relating to standardising clinical assessments was surprising, but a very welcome finding from both the survey and focus group with HEIs, HCPs and students. Standardising how student competence is assessed would inevitably lead to more consistency within clinical training. This should result in newly qualified radiographers beginning their careers from a standard start point, which in turn will also benefit their confidence levels.

The few comments received not in favour of standardisation still provided useful insight, such as that partial standardisation might be the way forward, with some elements standardised but with scope for local adaptations.

Interestingly, all students were in favour because of the huge variation they see between themselves and peers studying at different HEIs, which adds to the well-documented confidence issues that students face (6,24,25,33,34). If other students are seen to be doing more assessments or more clinical time, it makes students question their own ability.

It is recognised that this is not a small or easy task to undertake and something outside the scope of this project. However, the perceived benefits and impact this would have on the future training of therapeutic radiographers are realised. It is envisaged that this approach would need to start on a local/regional level, aligning documents and agreeing on a standardised process, pilot and feedback before national roll-out could be considered.

In terms of prior clinical experience, this did not feature in any responses from the survey or focus group. However, when exploring the role of standardised assessments this should be taken into account as an option for prior accredited learning. For example, when a student has experience of being qualified to undertake certain procedures (such as IV cannulation, patient observations etc), this should be facilitated for them to be able to undertake these tasks without the need for further formal training.

Standalone project:
• A regional pilot then national project to further explore the requirements of implementing a possible national model of standardised clinical assessment materials for Therapeutic Radiography students

Recommendation 11: Levels of student confidence

It can be seen from the findings that there are a number of factors that impact on student confidence levels and that if these are not addressed it can lead to increased anxiety, negativity and, ultimately, attrition. Relationships with others (academic staff, peers, clinical staff) all scored highly for affecting student confidence. Coupled with the increase in mental health and wellbeing concerns, the need to address this is key to prevent further attrition.

Confidence levels link with several other RePAIR recommendations and so it is important that this is addressed collectively. For example, relationships with others, and the support that can be offered through mentorship, buddy schemes and the like, could be pivotal to the impact of student confidence levels (Recommendations 5 and 6). The way students believe they are perceived by others can have a detrimental effect on their confidence levels.

This is particularly evident among those students whose training has been affected by COVID-19. Some students surveyed feel they are being labelled as *"the Covid cohort"* and are already nervous and anxious about beginning their qualified practice as they are worried they will not live up to the expectations required of Band 5 practice. The HEE impact study data (25) also confirms that this is a significant worry for students affected by the pandemic and so it is important that interventions are in place to support this group of students to feel valued, to recognise their skill set and to facilitate them seeking help and guidance in their early career. The HEE impact study also revealed that ethnic minority students reported higher anxiety levels than White students and felt that COVID-19 could have more of an impact on their future career. There is a

significant attainment gap between White and Ethinic minority students graduating with a healthcare degree. Work to address this is underway within HEI's and it is important that this is carried out in conjunction with HCP's to ensure a collaborative approach to reducing the attainment gap is achieved (35).

We have also seen from the findings that the final placement can be pivotal to the confidence levels experienced by students. It is important that therapeutic radiographers are seen as positive role models and are supportive, welcoming and encouraging to students of all years, but particularly so for those final year students. As they move into that transition period the team dynamics and support processes in place become key to facilitating students and newly qualified staff in the workplace through the 'flaky bridge'.

Strategies that can be employed to address student confidence levels include developing their mentorship and coaching abilities by supporting other students in practice, preparing final year students effectively for taking responsibility for their learning and development, and signposting students to support networks at an early stage in their career.

Proposals:
• Students should be encouraged to seek support early on and HEIs and HCPs need to ensure support strategies and where to signpost to are made readily available
• Peer-to-peer support, mentoring and buddy schemes to be available to all students and newly qualified staff

Recommendation 12: Preceptorship as an aid to retention

Preceptorship should provide the basis for a lifelong journey of personal and professional reflection, and the ability to identify professional development needs and ongoing support mechanisms available. It should provide newly qualified professionals with the tools to develop the knowledge, skills and behaviours gained during their pre registration training. A good preceptorship programme should enable the preceptee to feel valued, gain a sense of belonging and support the transition from student to graduate practitioner and beyond (36, 37).

It was positive to see that 78% of HCPs had a preceptorship programme, however, only two HCPs indicated that newly qualified staff undertook a trust-wide preceptorship programme. Most of the preceptorship programmes tended to be competency based, and many ensured a rotation through the radiotherapy department and in some cases other areas of the oncology setting. Health and wellbeing needs were not overtly identified as being part of the preceptorship programme. It does feature heavily in trust induction programmes (see Recommendation 14), although it is not always clear when the induction period ends and the preceptorship period starts.

It is well documented in the literature that students report increased anxieties around the time of qualification (6,24,25,33,34), and this is borne out in the evidence from the students surveyed for this project, who indicated that they were increasingly anxious about commencing their qualified practice due to the impact of COVID-19 and whether they would have the right level of skills expected of them. Only 10% of HEIs and 16% of HCPs indicated that they worked collaboratively to develop a preceptorship programme, yet it is evident that this transition period (or flaky bridge) can be a critical time for students. It can be seen from Recommendation 11 that all HEIs undertake some form of preparation for practice activities but there is scope for this to be embedded in a transition to preceptorship programme to enable a more seamless transition to qualified practice to occur.

It is recommended that preceptorship programmes, whether at trust or department level, include strategies for ensuring the health and wellbeing needs of the practitioner are being met and supported. Once the preceptorship period has been completed, the process of ongoing support is less clearly defined, and it is not clear if the mentor relationship noted by some HCPs continues. It is recommended that, following completion of the preceptorship programme, wellbeing support needs are routinely explored with all staff in clinical practice and all staff should have access to mentor/buddy support.

The integration of trust-led induction and preceptorship programmes with local department preceptorship programmes requires further investigation and evaluation and is currently being explored within other RePAIR workstreams.

Early careers development should also feature as part of a preceptorship programme so that staff are able to clearly define the role expansion opportunities within the workplace. This will help promote CPD activities and enable newly qualified staff to develop their portfolio of learning and begin to develop career pathways that can align to the four pillars of advanced clinical practice.

Proposals:
• HEIs and HCPs should consider local collaboration to develop a standardised preparation for practice online resource to support the transition from student to qualified practitioner, with an overt link to preceptorship
• Health and wellbeing support is integral to preceptorship and needs to be embedded within programmes, with a mechanism for ongoing wellbeing support developed and implemented once the preceptorship period has ended

Recommendation 13: Recruitment of newly qualified practitioners

Most HEIs are informed of vacancies by their local HCP, but this is not consistent and it is recommended that where possible HCPs inform the local HEI of any Band 5 vacancies to improve local recruitment and enhance maximum distribution of any vacancies.

24% of HCPs indicated that they support HEIs with any Band 5 recruitment activities, and these include interview preparation, CV/personal statement writing and attendance at recruitment fairs. To support students further, it is recommended that HEIs and HCPs look at a coordinated approach to recruitment activities for final year students to help prepare them for the Band 5 recruitment process, as discussed in Recommendation 12.

Approximately half of HCPs employ students as Assistant Practitioners (Band 4) while waiting for HCPC registration, and this could be a way of supporting the transition of students to newly qualified practitioners by enabling them to develop key graduate transferable skills, such as confidence building, induction into the trust and the beginning of the preceptorship process.

Recruitment can be challenging where there are large regional centres and smaller centres in similar locations, because staff tend to gravitate to the larger state-of-the-art centres, perceiving that they will get a 'better experience'. However, one region was exploring ways of having rotational posts (in physiotherapy) throughout the region so that new recruits got to experience a number of different centres during their employment, thus eliminating the concern that some trusts have few applicants due to not being perceived

as being large, state of the art or cutting edge. This could help recruitment issues in these areas but needs careful consideration of logistics for the staff member and department-specific training requirements. Within radiotherapy, where there are satellite centres rotation through these could be built into the job description and employment contract.

Proposals:
• HCPs to inform their local HEI of any Band 5 vacancies to support local employment
• HEIs and HCPs to continue to work collaboratively on a pre-qualification recruitment support package to include interview preparation, personal statement writing etc

Recommendation 14: Impact of culture of care and support for students/staff in clinical practice

'Culture of care' tools were not well known to either HEIs or HCPs. This could be because different models are being used and culture of care is embedded within academic modules and not overtly taught. Some students indicated that culture of care was of high importance to them and so it is important that it is more explicitly covered in the curriculum and reinforced in clinical practice for early career staff as part of preceptorship and ongoing support. The NHS Culture of Care Barometer (7) was designed in 2017 in response to a number of high-profile reports detailing system failings and the intrinsic link between culture of care and compassion. Its aim is to start conversations and to empower staff to lead the way in developing quality care and positive experiences for both staff and service users. Since then, a number of different tools and strategies have been developed to support the culture of care and examples of some of these are given in the online repository toolkit (ASPIRRE Appendix 1).

Supporting the future workforce is vital to reduce attrition and improve retention. It is recognised as a key priority in the NHS People Plan (38), which recommends that there needs to be a greater focus on the health and wellbeing of the NHS workforce, and that the workforce must be valued to grow and prosper. In particular, ethnic minority workforce members report some of the poorest workplace experiences (26), and the impact study data (25) found that ethnic minority students are reporting 30% more anxiety than their White counterparts. Ensuring an inclusive curriculum from the beginning is important in ensuring that the principles of inclusivity are embedded within all aspects of the academic journey which will also go some way to helping to reduce the attainment gap seen (35, 39). All students should feel empowered to seek help and support and to know that a culture of care is embedded in their education and training as well as their professional career.

While support for final year students is well evidenced in the findings, it is clear that there is a difference among HEIs as to when this is undertaken, with some having a dedicated module and some embedding it in other aspects of the academic course. HCPs recognised that the final placement could be 'make or break'' and that a difficult final placement can have a negative impact on student confidence and belief in their abilities; as noted elsewhere, this step has been termed 'the flaky bridge'. This has been particularly evident in students who have been impacted by COVID-19, who cite feeling anxious about qualification for fear they will not know everything that is expected of them because of missing placement time and having a disrupted degree programme. This cohort of students are to be encouraged to reflect on their experiences and the positive attributes they will bring to the profession (see Recommendation 12 and Recommendation 15 proposal), and professionals should refrain from labelling students.

Along with the practical side of supporting students in terms of the transition to newly qualified, emphasis should also be placed on support mechanisms, mentoring, coaching, communication and confidence-building skills to reduce the feeling of being overwhelmed and reducing the 'reality shock' of being newly qualified. Examples include enabling students to be mental health first aid (MHFA) trained. This can help support and empower them to be able to look after themselves and others and spot the signs of mental ill health, and to know where to signpost to help and support. Other strategies include coaching practice and peer support mechanisms. It is recommended that students should have access to the same trust-level support while on placement, and that some of these training packages (MHFA, resilience coaching etc) could be embedded in pre registration training. This has a transferable element in that the skills gained will enable students to support others more junior to themselves (within a buddy scheme, for example) and can be taken forward into qualified practice.

Newly qualified staff are well supported and there are several examples of trust-wide support schemes in place. Some of these are overtly linked to the induction and preceptorship programme while others are independent of this. It is recommended that department preceptorship programmes include health and wellbeing support strategies and that these should not finish just because the preceptorship period has ended. One HCP indicated that the professional development review (PDR) is used as a mechanism for checking on staff health and wellbeing, and this is one way of ensuring that health and wellbeing support is a regular aspect of the (newly) qualified practitioner role. It is important that a Culture of care philosophy is overt throughout a professional's career and wellbeing support readily available.

Proposals:
• The philosophy of Culture of care needs to be embedded within the pre-registration curriculum and clinical practice and its importance reinforced within preceptorship and continuing professional practice
• HEI's to continue to develop an inclusive curriculum and recognise diversity and equality to support all students and help reduce the attainment gap
• HEIs and HCPs to continue to work collaboratively locally on a shared model of support to include key graduate skills, such as communication, confidence, mentorship and coaching models, to ease the transition from student to qualified practitioner and help address the 'flaky bridge'
• Health and wellbeing support check-in points are important to embed throughout the employee's time in employment

Recommendation 15: Application of RePAIR to the new models of pre-registration education and training

COVID-19 should not be overlooked as having a significant impact on student training. HEIs have had to adapt the way they are teaching students, with cohorts undertaking predominantly online teaching. It is not yet known what impact this will have on attrition rates but anecdotally some HEI's are reporting high levels

of year 1 attrition for 2020/2021. Clinical departments may also notice a difference in students' knowledge and understanding, depending on the way they have been taught, and so extra support measures may need to be put in place to facilitate students to gain the competencies required to meet their practice objectives. However, we should be mindful of 'labelling' this cohort of students as 'the Covid cohort', as they invariably bring a huge wealth of knowledge, resilience, ability to adapt, think and act quickly to changing situations as some of the key graduate skills to professional practice. While they may have had less clinical time in terms of hours in clinical practice, a change in focus to a more competency-based training that can be supplemented by simulation activities is to be encouraged.

Simulation

While there is broad agreement that simulation can aid student training, there is a clear indication from many stakeholders participating in the study that simulation should not be a replacement for clinical training. It was felt by all stakeholders that an average of 20% of clinical time could be replaced by simulation activities. When explored in more detail, it was clear that the range of activities that stakeholders viewed as simulation mainly included the use of technology such as VERT, planning computers and role play with actors. It is recommended that HEIs and HCPs continue to work collaboratively on simulation activities. Such activities need to replicate real-world situations where possible to give students a realistic experience, including the use of actors to immerse students in the sensitive and often emotional nature of the interactions that take place in clinical practice.

The role of simulation needs to be explored in terms of the type and timing of activities undertaken to ensure that a range of skills can be demonstrated. These include practical skills, such as patient set-ups, treatment planning (CT positioning if available) and some mandatory training (basic life support and manual handling). However, there is a role for simulation in the use of communication, confidence building and resilience of students through activities around patient and staff communication strategies, team building, and confidence, using patient volunteers or actors as service users. Although simulation cannot replace hands-on clinical experience, its role is yet to be fully realised, and there is scope for it to sit alongside clinical practice training and form part of the assessed student competencies. Where the benefit is not realised, examples of good practice can be used to explore effective and successful use of simulation in the education and training of students. This links into clinical placement expansion programmes, which will ultimately allow the space to train more students at one time. There is also scope to explore the role of simulation in other areas of clinical practice support and development. For example 'return to practice' radiographers and internationally qualified radiographers can be given opportunities to demonstrate specific skills within a safe environment in order to demonstrate competency to practice.

This is a large-scale piece of work outside of the remit of this project but the scope for further exploration and development could make a significant change to the education and training of (Therapeutic) Radiographers.

Increasing student capacity on placement

There was a recognised need to increase capacity on placement from both HCPs and HEIs, but differences between them on how this can be best achieved. For example, having more than one student working on a linear accelerator (LINAC) could be a way to increase capacity, but some HCPs find this concept more challenging, citing that students would get less experience and have less time to get one-to-one support and education. However, where a paired model exists, staff report advantages, such as reducing the clinical staff input because students could support each other and learn together (peer-to-peer support), increased confidence levels and critical thinking skills (30). It is recommended that sites that only have one student per LINAC explore working practices of paired students and peer-to-peer learning strategies as a way to increase student capacity.

Other strategies for increasing student capacity included a variety of placements and non-traditional / non-clinical placements (appendix 1 workstream 3). Recent initiatives have seen AHP students undertake placements with HEE and there have been four radiography students who have undertaken a four-week internship with the Society of Radiographers as part of their final year placement. The placements include being able to attend strategic meetings as well as undertaking a small group project related to the placement, in line with a current workstream of the placement host. These placements are awaiting formal evaluation but early feedback from the students has been really positive.

Some HCPs have expressed an interest in undertaking alternative placements, such as research placements for pre registration students. HEIs and HCPs can work collaboratively to explore how alternative placements will enable students to achieve core (graduate) competencies and ensure that any competencies and learning outcomes are aligned to the placement experience. Engaging stakeholders during the design phase of clinical competencies can ensure a wider variety of placement experiences can be achieved while making sure students are still able to meet the standards of education and training required of the professional statutory and regulatory body (PSRB).

As with all strategies involving the expansion of clinical placements, it is imperative that clinical and academic staff are adequately trained to effectively support and facilitate student training. All stakeholders recognise that investment in student training, in particular for those staff who are directly involved in the assessment of students, is vital if placement expansion programmes are to be realised. This investment should include increasing the number of staff available to support students during their education and training but also ensuring that those staff have the appropriate skill set to be able to effectively guide students through their training. This should include suitable postgraduate study in teaching and education as well as knowledge and understanding of health and wellbeing. Mental health first aid (MHFA) training or coaching skills are examples of the support mechanisms those involved in the education and training of students and newly qualified practitioners could look to possess.

Proposals:
• HEIs and HCP' need to avoid labelling students as 'the Covid cohort' and look to reinforce the positive contribution that students whose training has been impacted by COVID-19 will have on the future profession, including their resilience and ability to adapt to challenging situations. There may be a need for specific support and guidance to increase confidence and reduce anxiety, and an adaptation to the preceptorship programme
• HEIs, HCPs to work together to explore innovative strategies for increasing student placement capacity, such as non-traditional / non-clinical placements, peer support for students to support learning and development, buddy schemes and more than one student per practice area

Standalone project:
• Evidence from the survey data and focus groups shows that up to 20% of clinical practice could be replaced by simulation. This aligns with published findings from other professional groups including occupational therapy (10-12), who recommend up to 25% of clinical practice can be replaced with simulation activity. Other professional groups are currently scoping the optimum use of simulation within training programmes (13) in line with HCPC Covid recommendations (14) and HEE's National toolkit to support the use of simulation in health and care (15).
• This requires further investigation on how this can be embedded in training programmes, and other settings including 'return to practice' programmes and supporting internationally qualified radiographers. It is recommended that a professional body guidance document on simulation be produced.

Project development

The report findings and discussions identified a number of additional proposals from the original 15 RePAIR recommendations that could be explored further. A traffic light system was used to identify the most important priority areas from the proposals, based on survey responses and stakeholder engagement. From this a number of different priority workstreams were identified and developed into the AHP Support Programme for Implementing Recruitment, Retention and Engagement (ASPIRRE) and online live resource toolkit (Appendix 1), applicable to all AHPs. There are six workstreams (see Table 3) developed from the priority areas, which include considerations for their implementation. This ongoing live resource toolkit will be housed on a Radiography special interest group platform and will enable participants to use and develop resources for student and professional workforce expansion and transformation. The data will inform future work planning on a regional basis, individualised to the service needs of the population and will create further opportunities to bring stakeholders together. There is a RePAIR in Radiotherapy Webinar (Appendix 2), describing the project and the main findings.

There are two standalone projects that have been identified as requiring separate investment, research and development. Their implementation is seen as pivotal to the expansion of radiotherapy education and training in terms of recruitment, retention and placement growth. Investing in these project areas will help to future-proof the profession to manage the growing demand for cancer services and the prediction of a need for a 45% increase in therapeutic radiographers by 2029 (19), and support the development of innovative, forward-thinking healthcare professionals.

Standalone projects:

- A national project to further explore the requirements of implementing a possible National model of standardised clinical assessment for Therapeutic Radiography students
- Evidence from the survey data and focus groups shows that up to 20% of clinical practice could be replaced by simulation. This aligns with published findings from other professional groups including occupational therapy (10-12), who recommend up to 25% of clinical practice can be replaced with simulation activity. Other professional groups are currently scoping the optimum use of simulation within training programmes (13) in line with HCPC Covid recommendations (14) and HEE's National toolkit to support the use of simulation in health and care (15)
- This requires further investigation on how this can be embedded in training programmes, and other settings including 'return to practice' programmes and supporting internationally qualified radiographers. It is recommended that a professional body guidance document on simulation be produced

Priority areas:

- There is strong evidence to further explore the requirements for implementing a possible national model of standardised clinical assessment for Therapeutic Radiography students
- Evidence from the survey data and from those attending the focus groups demonstrated that up to 20% of clinical practice could be replaced by simulation. Activities included VERT, planning placements and role play with actors. This requires further investigation, both in relation to the amount and types of simulation that might be feasible and the timing of this within programmes. This includes understanding how and when simulation could be best optimised and embedded in education and training pre registration programmes
- The value of simulation in supporting those returning to practice and within specific 'return to practice' programmes, together with the capability of simulation to support internationally qualified radiographers requires further exploration
- A dedicated online recruitment package, with career signposting and transparent outreach information to allow potential Therapeutic Radiography students to make informed choices about Therapeutic radiography as a career and profession would be valuable. It is important that this harmonises with existing resources and profession-specific online recruitment materials
- Further work is recommended to identify how best to support HEIs and Radiotherapy HCP's to collaborate on shared models of pre-qualification/pre- registration support and 'transition to practice' modules. This would help to ease the transition from student to qualified practitioner, address the 'flaky bridge' and prepare students for induction and preceptorship. Enabling students and newly qualified professionals to actively be able to seek support early on in their training or within their professional career
- Creation of a national student support toolkit, allowing HEIs and Radiotherapy HCPs to co-produce a repository of support mechanisms, such as buddy systems, peer support, focus groups, social media groups and 'culture of care' tools is recommended specifically for Therapeutic Radiography students. It is noted the SoR has a Student and New careers officer, and this work is in development

- There are opportunities for HEIs and Radiotherapy HCPs to explore innovative strategies for increasing student placement capacity, such as non-traditional/non-clinical placements, peer support for students to support learning and development, buddy schemes and more than one student per practice area, as examples to meet the transformation agenda and clinical expansion programmes
- 'Culture of care' philosophy to be embedded within the pre-registration curriculum and clinical practice and its importance reinforced within preceptorship and professional practice. An inclusive curriculum and recognising diversity and equality should be a priority, with health and wellbeing support check-in points embedded throughout student training and continued throughout employment
- There is opportunity for access to financial support to be streamlined for all health cares, including radiotherapy students, requiring additional support, particularly for placement costs. Hardship funds to be rebranded to 'instant access loans' and be accessible on more than one occasion. The time to pay back any loans could be increased and repayment instalments considered . The impact the NHS Learning Support Fund has had on recruitment needs to be understood for students from 2020. (5)
- It is recommended that HEIs and HCPs collaborate and discuss attrition data regularly and review processes to support students to remain on their programme of study, especially when attrition is related to placement experience (directly or indirectly)
- Different roles titles are frequently used by Radiotherapy HCPs and HEIs to describe (student) support roles, it is suggested that work is led nationally to standardise titles, and to help protect time for those providing education, training and support for all learners in the workplace
- There should be regular feedback and feedforward on progress from both clinical practice staff and academic staff to aid student retention. Newly qualified staff should also receive regular feedback and feedforward from their preceptor or mentor
- In order to help support potential students making the right career choice it is recommended that Radiotherapy HCPs continue to offer clinical visits (COVID-19 permitting) for prospective students

- To support local employment it is recommended that HCPs inform their local HEI of any Band 5 vacancies
- There is evidence demonstrating the benefits of employing students' as Assistant Practitioners (Band 4) while awaiting Health and Care Professions Council (HCPC) registration
- There is strong support for clearer role expansion opportunities and continuing professional development (CPD) activities, and investment in post registration education and training to complement clinical roles and careers clinics to aid retention of qualified staff and develop the four pillars of (advanced) clinical practice-, which are clinical practice, leadership, management and education (8)
- Competency of those involved in student assessment needs to be reviewed annually, in collaboration with linked HEIs. Those involved in student assessment are encouraged to work towards formal qualification such as CoR PEAS accreditation (9)

These project recommendations align to the work of RePAIR and other workforce agendas, such as Strategic Interventions in Health Education Disciplines (SIHED) programme findings (40). The supporting toolkit (Appendix 1) will enable key stakeholders to be provided with examples of initiatives and suggestions on ways to implement and develop the priority workstreams within their practice/education. It will be a fluid repository of examples that can be added to and adapted as part of the special interest group, ensuring that the work from this project continues and develops as the emerging landscape post COVID-19 becomes apparent.

ASPIRRE workstreams

Table 3: ASPIRRE workstreams

Workstream		Considerations for implementation
1	Effective recruitment initiatives (including outreach)	Library of resources needs to be collated and housed (RePAIR SIG/outreach SIG/online resources) Accessible by anyone and links sent to schools/colleagues/careers advisors/students Should include: role of radiation treatments in healthcare; role of a therapeutic radiographer; how to prepare for a clinical visit to a radiotherapy department and applying for a course/training; a career as a therapeutic radiographer; departmental tours; links to national recruitment campaigns Awareness of impact of COVID-19 on future recruitment and outreach strategies
2	Effective retention initiatives – national student support toolkit	Student support needs to be formalised. HEIs and HCPs should collaborate to produce a repository of student support mechanisms, such as: buddy systems, peer support, focus groups, social media groups (eg WhatsApp, Twitter), 'culture of care' tools Terminology of roles within professional groups should be standardised. Communication between HEIs and HCPs needs to be formalised when student attrition is related to placement experience
3	Strategies to increase student placement capacity	Simulation – use of simulation, types of simulation, and standardise the percentage of clinical practice replaceable by simulation (up to 20%) Non-traditional placements – leadership, research and education placements linking into CPEP and training students around four pillars of advanced practice Review workforce training strategies eg number of students per training area Impact of COVID-19 on new ways of working and training
4	Placement allocation and funding support	Sourcing placement accommodation, paying in advance and reclaiming costs should not be the sole responsibility of students Terminology – 'hardship fund' needs to be reviewed
5	Standardised clinical assessment	To start working towards standardising assessments, neighboring HEIs should work together to align methods of assessment and student objectives, with a view to national roll-out
6	Preparation for practice (addressing the 'flaky bridge') and early career support (preceptorship)	HEIs and HCPs should work to provide a standardised 'preparation for practice' programme including interview prep, CV writing, outreach and key graduate skills (including 'culture of care') Departments and the wider trust should look to develop effective preceptorship programmes for AHPs to support new graduates/employees. This should include: induction, preceptorship, mentorship, career support and development, wellbeing and resilience, and profession-specific objectives HCPs could employ final year students as Assistant Practitioners (Band 4) while waiting for HCPC registration to facilitate transition, induction and preceptorship and improve student confidence levels

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Appendices

Appendix 1: ASPIRRE toolkit

The following toolkit contains some examples of good practice and strategies to aid stakeholders to implement the AHP Support Programme for Implementing Recruitment, Retention and Engagement (ASPIRRE) workstream recommendations. These will form part of the online resources within the RePAIR special interest group (SIG) and will continue to be populated through the live resource.

Workstream 1

1. Effective recruitment initiatives (including outreach	Collating resources into online resources will reduce duplication and improve cost effectiveness. A library of resources needs to be collated and housed, possibly by outreach SIG? This should be accessible to anyone and links sent to careers advisors, students etc. It should include: departmental tours, I See the Difference campaigns, the WOW Show. There needs to be awareness of the impact of COVID-19 on future recruitment and outreach strategies.

Examples include:

- Accessing the special interest group to explore the range of resources available
- Link in with SoR recruitment and outreach officer
- Accessing the e-Learning for Healthcare recruitment module (this will house all the resources such as I See the Difference, WOW Show etc)
- In-house resources such as 'patient pathway days' for prospective students

Patient pathway day for prospective students

- Overall aim: The project aims to refocus the recruitment agenda to provide a future radiotherapy workforce from within the community, for the community

Specific objectives:

- To raise awareness of radiotherapy within the local community as a potential career pathway
- To explore collaborative working opportunities in relation to recruitment, using the clinical department facilities and resources
- To engage clinical staff at all levels in the process of promoting, exploring and responding to recruitment initiatives
- To develop interactive pathway days when students will experience clinical settings to show realistic and positive components of the profession prior to enrolment

Procedure:

Current students and staff hosted interactive patient pathways within the clinical department on Saturdays throughout the summer months (2019) as part of the pilot project. Prospective students were able to follow a patient pathway and gain understanding of the individual processes involved in the patient's radiotherapy journey. This included arrival in the department, the mould room process and pre-treatment imaging required for safe, accurate treatment delineation. They also visited the CT scanner and gained an understanding of the 3D anatomical data collected, and the theoretical application of this data in radiotherapy planning to achieve tumourcidal radiation doses while minimising the doses to normal tissues. They were then given the opportunity to handle the hand controls to simulate the treatment set-up and delivery (on treatment unit and with VERT). On completion of the patient pathway, participants had the opportunity to interact with existing students and academic and clinical staff to consolidate their understanding of both the profession and the course

An online resource was created for use during the pandemic. It includes the procedures described above, the skills and qualities required to be a therapeutic radiographer, plus input from other specialities to describe the variety of roles available

The intention was to expand this opportunity to local schools/colleges and the wider community to raise awareness of the profession and recruit students to courses

Workstream 2

2. Effective retention initiatives: National student support toolkit	Student support needs to be formalised. HEIs and HCPs should work together to produce a repository of student support mechanisms, such as: buddy systems, peer support, focus groups, social media groups (eg WhatsApp, Twitter), 'culture of care' tools. Terminology of roles within professional groups should be standardised. Communication between HEIs and HCPs needs to be formalised when student attrition is related to placement experience.

Case study: Student support mechanisms

A variety of student support mechanisms have been identified as having a positive impact on student training, health and wellbeing, and, ultimately, retention.

- Student-to-student buddy schemes and peer support
- Student-to-therapeutic radiographer buddy schemes
- Mid-placement focus groups
- Social media groups
- 'Culture of care' tools

Student-to-student buddy schemes

1. There was an example of an official student-to-student buddy scheme managed by the students union, offered to all healthcare students but organised into courses to maximise support.

   "The aim is to link freshers (1st years) with returning students who will act as a 'go to' for advice about courses and university life. There is also a huge social aspect, often coming together to bond over a meal, pint or game."

   New students complete a Google form, which is used to pair them with a more senior student, with questions ranging from their degree course to hobbies, social activities and drinking preferences to allow accurate matching. This potentially creates a large 'family' of students with the same interests, with first years paired with second years who still have their buddies from the year before.

2. There were several examples of senior students buddying first year students. One example explained that:

   "Year 1 students have both a Year 2 and a Year 3 mentor from the same clinical site."

   "3rd years support 1st years, including debrief sessions after clinical placement."

   It was noted that, although students might not be on placement together, they can still support each other at a distance because they are all experiencing the same clinical site, mentors, assessors, techniques etc.

Student-to-therapeutic radiographer buddy schemes

1. One clinical department has a 'student liaison team' (dedicated group of radiographers) who meet every six weeks to explore better ways to support students. The team works on student engagement and tries to ensure all students have a 'staff buddy', who they keep for the duration of their training.
2. 'Staff mentors' are offered to all students; these are often newly qualified staff or have been qualified for up to two years. This ensures that they are not involved in students' assessments, to promote openness and transparency from the students about their experiences. Students choose their own mentor (from a group of staff), based on who they feel would be best suited, which has proved successful given that we are more likely to have honest and open discussions with someone we feel more comfortable with.
3. 'Staff mentors/preceptors' provide tutorials/practice sessions for each year individually to provide extra support.
4. One department also discussed their buddy scheme, whereby students are assigned a buddy when they come out for their induction placement. This person is there to show them the way around the department, where to go for breaks, and what to do and not to do. They will be available for the student throughout their placement time.

Examples of placement support mechanisms:

- Mid-placement focus group

At the midpoint of a clinical placement, a junior member of staff (within the first two years post-qualifying) undertakes a mid-placement focus group with all students from the HEI. The purpose of the focus group is to ascertain how students are finding their placement, whether there are any worries or concerns, and if they feel they are getting the support required to complete their placement. The importance of undertaking the focus group mid- placement is so that any issues can be addressed and resolved during the placement period and thereby improve the placement experience. It is important that students are encouraged to speak openly and honestly and that any concerns raised will not have any repercussions for their training. Commonly students give feedback after a placement has finished, which then means any remedial action is not able to be realised until the next cohort of students come onto placement, and they may report different worries or concerns.

Examples of the questions asked include:

1. How were you feeling prior to commencement of placement when you knew you would be on placement at ..... Radiotherapy Department?
2. Did you perform an internet search before placement, and if so what did you find?
3. Did you have access to ..... Radiotherapy Department's student welcome pack before commencement of your placement?
4. Were things different once you arrived?
5. What have you particularly enjoyed on placement?
6. What have you least enjoyed on placement?
7. Could we have supported you better in any area of your placement?
8. Have your HEI supported you sufficiently while you have been on placement?
9. Has it helped having a named assessor/practice educator?
10. Are you aware of any bullying/harassment whilst on placement?
11. Do you know who to contact/ what to do if you or a fellow student are subject to harassment?
12. Has your experience during placement led you to be absent from the department?
13. Have staff attitudes towards you been consistent throughout your placement?
14. Are you satisfied with the amount of academic work to be carried out while on placement?
15. Are there any other experiences you would like to carry out while on placement, but have been unable to (eg visit to information centre, oncology ward etc)?
16. Have you had any time using simulation activities?
17. How would you rate your overall experience of your placement so far?
18. Any questions?

- On-line support

Example 1: The use of social media groups can be a way to support students during their placement and provide an opportunity for them to contact key staff to ask for advice or information. There needs to be clear ground rules on professional conduct, hours of operation (including when they can expect a reply) and what the terms of reference for the group are. Ideally this contact should be via a work phone rather than a personal phone that is used by clinical staff. Examples of platforms to use include WhatsApp, Microsoft Teams groups and Google communities.

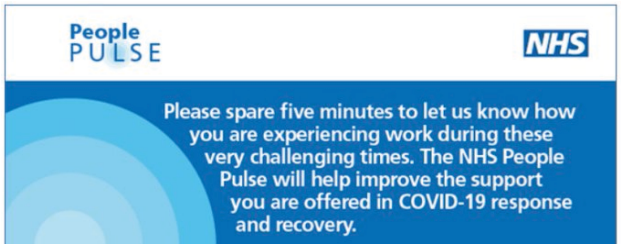
Each group of students and their practice educator, mentor or buddy join a WhatsApp group or other social media platform for the duration of their placement. They are then able to use this as a communication tool during placement to ask questions and request advice or information.

Example 2: A series of timetabled drop in online support sessions are held during the student's clinical placement with a practice educator (or nominated staff member). Students are able to use this safe space to be able to share ideas, ask questions, and talk through any worries and concerns with each other and the practice educator who then facilitates the students to explore strategies for managing any areas discussed.

- Culture of care tools

A number of different tools exist to ensure a culture of support and care within practice is available at all levels. Examples include:

- Culture of Care Barometer (7)
- NHS support for leaders: Support for leaders through COVID-19 – Our NHS People (41)
- Supporting our people: Our NHS People – Supporting our people: Helping you manage your own health and wellbeing whilst looking after others (42)
- Your voice counts. The People Pulse survey (43)



Workstream 3

3. Strategies to increase student placement capacity	Impact of COVID-19 on new ways of working and training Review workforce training strategies eg number of students per training area Non-traditional/non-clinical placements, including leadership and research placements, linking into CPEP programmes and training students around four pillars of advanced practice Simulation – use of simulation, types of simulation and standardise the percentage of clinical practice replaceable

Review the number of students per clinical area

Where there is more than one student in a clinical area, work can be scheduled as follows:

Time	Student 1	Student 2
8am–10am	Clinical time	
10am–12 noon	Non-clinical duties	Clinical time
12 noon–12.30pm	Lunch	Clinical time
12.30pm–1pm	Clinical time	Lunch
1pm–3pm	Clinical time	Non-clinical duties
3pm–4pm	Non-clinical duties	Clinical time
4pm–6pm		Clinical time

Shift the working day so students get dedicated 1:1 clinical time. Lunchtime and break times can be shifted. This can work when you have students from the same year group, different year groups and different HEIs.

Clinical: patient-facing roles (eg patient treatment set-ups), patient review, online imaging

Non-clinical roles: audit processes such as off-line imaging, workflow organisation, support roles, oncology clinics (patient review, new patient clinics etc), academic work to support placement such as case study research and write-up, learning objectives/competencies, digital/online learning packages

Alternative strategies:

Example 1: If students of different year groups are on placement together, students can work together to peer teach/learn and support each other in the clinical environment. This follows the principles of the collaborative learning in practice (CLiP) model, whereby senior students mentor and support more junior students and can undertake some formative assessment sign-offs.

Example 2: Identify the number of different clinical areas that students are able to gain practice experience and ensure they are rota'd within these areas to maximise student numbers within a department but minimise individual students numbers in a given area at any one time. Supplement time spent in each clinical area with digital learning packages such as online learning resources that students can work through in their non clinical time. For example, for a 30 hour week placement, 24hours will be spent within the clinical environment (on the treatment unit or other identified clinical area) and
6 hours will be spent undertaking supplementary digital learning packages. Examples of clinical areas that can be supplemented with digital learning include: First day chats, off line imaging, quality assurance, protocol development and review, patient review, patient treatment, pre-treatment, mould room, brachytherapy, clinical research etc. Feedback and feed forward sessions on the digital learning material should occur at regular intervals by supervising staff.

Alternative strategy:

If students of different year groups are on placement together, students can work together to peer teach/learn and support each other in the clinical environment. This follows the principles of the collaborative learning in practice (CLiP) model, whereby senior students mentor and support more junior students and can undertake some formative assessment sign-offs.

Non-traditional/non-clinical placements

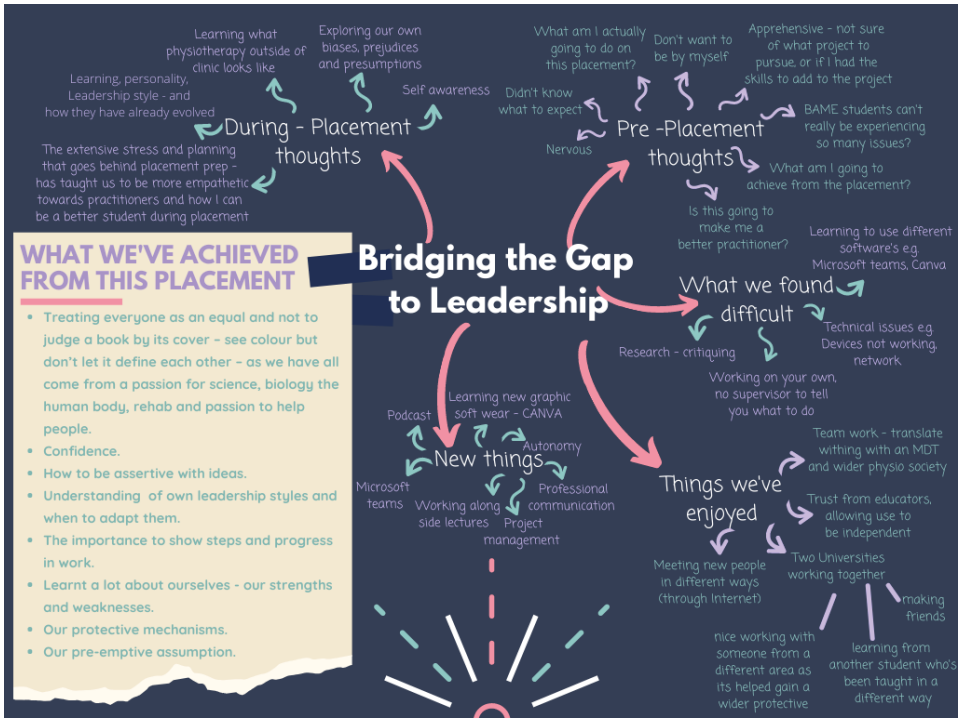
HEE has a toolkit of practice-based learning resources with different placement strategies to explore for AHP students within a public health setting, leadership and technology-enabled care services (TECS) (44).

Hints and tips for developing non-traditional/non-clinical placements:

• Consider the name and type of placement so that it is attractive to potential students	• Project-based placement (research) • Personal and professional development placement (leadership) • Outreach and public health placement • Educational placement
• Placement duration	• About four to six weeks
• Standalone or hybrid placement (split with clinical practice)	• Consider hybrid for Year 1 or Year 2 students, standalone for more experienced students
• Number of students	• More than one student within a placement where possible • Important to consider other peer learning support mechanisms (consider interprofessional student groups)
• Allocation of placements	• Consider if voluntary, expression of interest/merit. If compulsory, this can increase the resistance to undertaking a non-traditional placement
• Placement preparation	• Consider the time required to set up the placement and the tasks to be undertaken. This should be facilitator-led to begin with and then student-led by the end
• Placement content	• This should be structured and have a focus such as audit, project work and strategic impact (including case studies of previous workstreams)
• Placement feedback, presentation and assessment	• Consider the target audience for feedback of projects/reports and how findings will be disseminated and students assessed

Example of work produced on a leadership placement:

Figure 23: University of Brighton Supporting Health and Sport Students in Practice: Improving practice learning for everyone – 'Bridging the gap to leadership' placement



Specific placement examples include:

A 'roundabout week'

During this week students are able to visit a number of different departments within the oncology setting and wider hospital, spending a day in each area. Each student has one 'roundabout week' per placement, thus enabling scope for increased placement capacity.

Examples include:

- Oncology wards
- Chemotherapy clinics
- Hospice/charity (Maggie's/Macmillan)
- Information centre
- Patient bookings
- Pathology
- Pain clinic
- Patient review/new patient/follow-up clinics/late side effects
- Cancer nurse specialist
- Dietician, speech and language therapy etc
- Oncology consultant shadowing

Society of Radiographers leadership placement (four weeks)

This was a pilot study to support students in developing leadership skills and gain an insight into how the professional body and trade union for radiographers runs.

The pilot was project-based and students worked in pairs on a time-limited project. They led the project from start to completion with the support of a mentor/practice educator at SoR. There were also weekly coaching sessions to enable the students to consider progress and formulate options for developing their project. This should empower them to develop solutions.

The mentor/practice educator and coach at SoR assisted in directing students to appropriate resources, fine-tuning their ideas, supporting them and monitoring their progress, but ownership of the project was with the students. SoR staff were there to support their learning and development, so they were able to provide any support or advice they needed.

The project's overall aim included two key objectives:

1. To investigate ways to engage students with the SoR in a way that would add value to their student journey and prepare the foundations for, or develop, one of these ideas
2. To develop a peer support network for students

Learning outcomes for the placement:

- Develop an understanding of the role of the professional body within wider healthcare settings
- Gain an understanding of the necessary leadership skills and attributes to support excellent healthcare services, particularly leadership opportunities for radiographers
- Critically evaluate personal leadership skills and style and their impact on team dynamics, and reflect on leadership development needs
- Develop concepts, evaluate evidence and apply judgement and creative reasoning to undertake a project within a specified time frame
- Synthesise evidence, critically review options and generate solutions
- Develop team working skills and autonomous working. Take responsibility for accessing support and accepting accountability for determining and achieving both personal and team outcomes
- Demonstrate effective communication skills to present findings both orally and in writing
- Utilise social media to appropriately disseminate work and communicate with SoR members

AHP leadership placement with trust head of AHPs

The leadership placements arranged have been planned in the team and then discussed with HEI staff to see if they thought these would support the students to sign off their objectives. The offer of a placement is then offered to students as an expression of interest. The HEI then tries to ensure the correct students are allocated for these styles of placement. This is for placements that are 100% non-clinical.

Projects completed by the leadership students include:

- Developing an induction booklet for new Band 7 AHPs (included links to sickness policies, how to investigate a Datix incident report, useful contact names and numbers etc)
- Interviewing senior management to understand what leadership means in the trust; they have been invited to come back and present their findings to the executive board
- Being given £100 to spend on a wellbeing item for the AHP staff; they needed to show they had asked staff what they wanted, investigated how to access the money and how to order items, and checked if infection control were OK with the item

Research placement tasks

- Undertaking audit of clinical practice and patient information sources
- Involvement in clinical trial recruitment and delivery
- Screening and interventions
- Trial evaluation and patient feedback
- Good Clinical Practice (GCP) training (45)
- Presentation of any findings

Role of simulation

Simulation activities can include:

- Role play on VERT (virtual environment), to include: hand pendant use, patient set-up, error management, simulation of principles that are commonly automated (e.g. field sizes), cross-sectional imaging and anatomy identification. Formative and summative assessments can be built into this
- Planning suite – ideal if remote access. Students can work through a series of guided workbooks or tutorials to aid and supplement planning theory, concepts and practical experience
- Role play – students can role play between each other but a more valuable real-world experience is to use actors or service users as this enables a more realistic experience to be gained. Examples include: first day chat, pre-treatment appointment process, side effect management and review, post-treatment information, brachytherapy information

Workstream 4

4. Placement allocation and funding support	Sourcing placement accommodation, paying in advance and reclaiming costs should not be the sole responsibility of students. Terminology: 'hardship funds' needs to be reviewed.

An example of an email template for students to use to secure placement accommodation:

Hi,

I am looking for accommodation while undertaking an education placement at the …….. Hospital in the …… department, from the …… to the……

I study at …….. and as part of the course have to complete placements at various hospitals. There is no hospital accommodation available and so I am looking for alternatives. I will be out at the hospital from ……am to …… pm, and will have revision and write-ups to complete in the evening. For this reason, internet access will be very important.

Add any additional information as you need, perhaps a little more about yourself or questions if you have any specific requirements.

Many thanks for your assistance.

Workstream 5

5. Standardised clinical assessment	In order to start working towards standardising assessments, neighbouring HEIs should work together to align methods of assessment and student objectives, with a view to national roll-out.

This is a separate workstream.

Workstream 6

6. Preparation for practice (addressing the 'flaky bridge') and early career support (preceptorship)	HEIs and HCPs should work to provide a standardised 'preparation for practice' programme, including interview preparation, CV writing, outreach and key graduate skills (including 'culture of care'). The department and wider trust should look to develop effective preceptorship programmes for AHPs to support new graduates/employees. This should include: induction, preceptorship, mentorship, career support and development, wellbeing and resilience, and profession-specific objectives. HCPs could employ final year students as Assistant Practitioners (Band 4) while waiting for HCPC registration to facilitate transition, induction and preceptorship and to improve student confidence levels.

Preparation for practice programme resources – to be developed within special interest group

Example of preceptorship template:

Initial meeting

Preceptee name:	
Preceptor name:	
Date of meeting:	
Expectations:	
Induction checklist:	
Study days/e-learning planned:	
Development plan:	
Objectives: Should be SMART (specific, measurable, achievable, realistic and timebound)	
Health and wellbeing/ culture of care	
Next meeting date:	
Preceptee signature:	
Preceptor signature:	
Date:	

Interim meeting

Preceptee name:	
Preceptor name:	
Date of meeting:	
Reflection on what has gone well and any challenges:	
Study days/e-learning completed: Future study days planned:	
Review of previous development objectives:	
Development plan:	
Objectives: Should be SMART (specific, measurable, achievable, realistic and timebound)	
Health and wellbeing/ culture of care review	
Next meeting date:	
Preceptee signature:	
Preceptor signature:	
Date:	

Final preceptorship meeting

Preceptee name:	
Preceptor name:	
Date of meeting:	
Expectations:	
Reflection on what has gone well and any challenges:	
Study days/e-learning completed: Future study days planned:	
Review of previous development objectives:	
Ongoing development plan: Objectives should be SMART (specific, measurable, achievable, realistic and timebound)	
Health and wellbeing/ culture of care review	
This is to confirm that the preceptee has completed all aspects of the preceptorship programme satisfactorily.	
Preceptee signature:	
Preceptor signature:	
Date:	

Rationale for employing as Assistant Practitioners (Band 4) prior to Band 5 qualification

"The rationale for doing this is to secure the 'soon to be qualified' radiographers as soon as possible and start their induction as Band 4s. It will save the trust some money as they are employed as Band 4s for their supernumerary induction and it is not essential to be a Band 5 for about the first three months of employment, as what they do initially is within the scope of practice of an AHP. (It is only when you add in the complex techniques and imaging/decision making that they need to be a Band 5.) You can then get them joining the rota as fully fledged Band 5s as soon as their HCPC has come through rather than only starting their induction then.

"It also means that the 3rd year students can start working and earning as soon as they have submitted their final assignments and dissertation, which can help them financially too."

Appendix 2: Radiotherapy RePAIR webinar

This webinar showcased the rationale for the project, the main drivers and explained the purpose of RePAIR. It detailed preliminary findings from this project along with some key take home messages. Please access the 45 minute webinar using the following link:

https://vimeo.com/595925153