

Written evidence submitted by The Society of Radiographers (ECS0030)

Thank you for the opportunity to submit a response to the Health and Social Care Committee Expert Panel review of cancer services.

The [Society of Radiographers](#) is the trade union and professional body for radiographers and all non-medical members of the workforce in diagnostic imaging and radiotherapy in the UK. It is responsible for their professional, educational, public and workplace interests.

The College of Radiographers is the charitable subsidiary of the Society and it exists for the benefit of the public. The College's objects are directed towards education, research and other activities in support of the science and practice of radiography.

Together, the Society and College (SCoR) represent in the order of 30,000 members, shaping the healthcare agenda and lead opinion on a wide range of professional issues. We set the standards that become the policies adopted and acclaimed by governments and health professionals worldwide. In the workplace, we pioneer new ways of working and ensure that imaging professionals work in a safe and fair environment.

We note use of 'Therapy radiographer' within the House of Commons planning grid. Please could we request use of the [regulated](#)¹ professional titles Therapeutic Radiographer | Diagnostic Radiographer across all documentation.

SCoR would welcome the opportunity to discuss in further detail any of the issues and provide oral evidence as appropriate.

Summary

Therapeutic Radiography

- Increase in the number of funded clinical placements to support increase in pre-registration training numbers at Universities (HEIs) beyond the current rate
- Investment in additional leadership roles to support workforce retention and implementation of new innovations and technologies, and to lead workforce transformation
- Better use and development of all radiography workforce skills to enable service innovation, and implementation of best practice, with the goal of delivery of enhanced services for cancer patients
- Investment in post registration education and training to support implementation of new advancing practice roles to support improved team effectiveness for improved patient outcomes.

1. Workforce

Workforce planning Number of trained professionals in each role, change in percentage since the commitment was made:

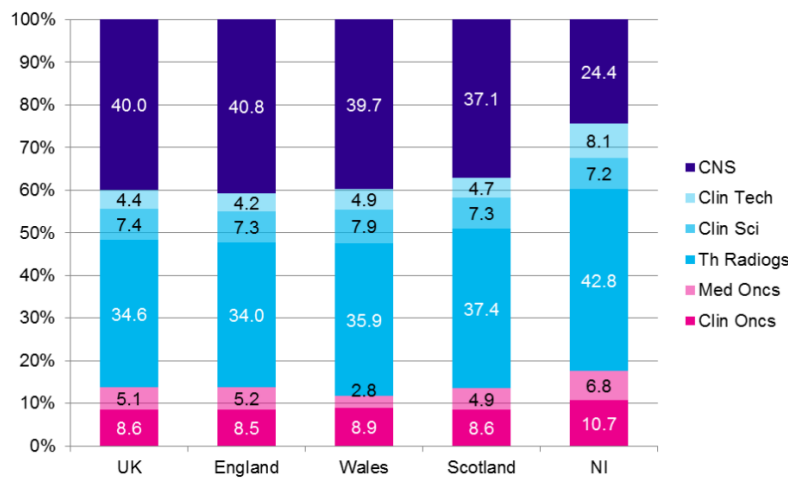
Radiography is the fastest growing Allied Health Profession (AHP). 90% of patients will directly interact with a Diagnostic radiographer during their NHS treatment pathway – many patients are now as likely to encounter a radiographer as a nurse.

The use of medical imaging has soared in recent decades - both in diagnostic radiography (with the expansion of screening programmes and greater demand for diagnostic scans); and therapeutic radiography, with cancer treatment technologies changing and expanding at a revolutionary speed. This rocketing demand is forecast to continue. Radiography and HCPC registered Diagnostic and

Therapeutic radiographers are remarkably cost-effective and efficient so getting radiography right is at the core of the NHS's ability to meet cancer survival targets.

Therapeutic radiographers are allied health professionals (AHP) trained solely in cancer and they are responsible for planning and managing the radiotherapy patient pathway. They are extensively involved at all stages of the patient's radiotherapy journey. Therapeutic radiographers are not only responsible for the planning and delivery of accurate radiotherapy treatments using a wide range of sophisticated and technical equipment, they have unique expertise and skills required to care for patients before, during and after radiotherapy, fulfilling ~ 35% of the non-surgical cancer treatments workforce as demonstrated in the chart entitled Figure 4 below from the Cancer Research UK Non-surgical Cancer Treatment workforce report ²

FIGURE 4: PROPORTION OF STAFF IN UK NATIONS



Source: RCR; RCP; SCoR; IPEM; NHS Digital; StatsWales; ISD Scotland; Department of Health Northern Ireland

Therapeutic radiographers also continue as key professionals in delivering optimal care whilst developing roles and support within the radiotherapy service. There is increasing complexity of both treatment planning and delivery with incorporation of multiple imaging modalities (4DCT, PETCT, MRI, Ultrasound) into these processes. Radiographers are ideally placed and have the skill set to support the interdisciplinary setting.

Figure 1

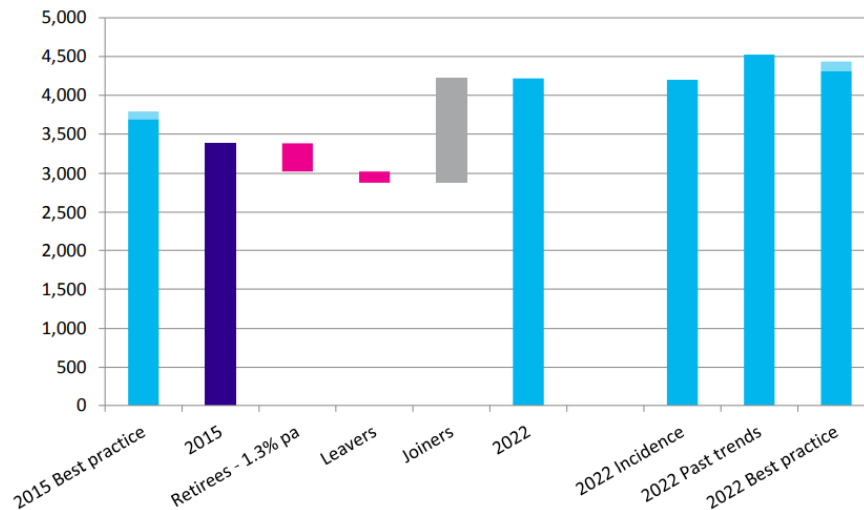


Figure 1 above, published by Cancer Research UK shows that the Therapeutic Radiographer workforce is not growing as predicted needed to deliver best practice oncology services (including staff working at advanced practitioner level to support the medical workforce).² As can be seen from the above chart the Therapeutic Radiography workforce number in 2022 shows a gap in workforce numbers of approximately a 6.8% shortfall.

To what extent has the NHS's Covid-19 response affected progress on targets?

Throughout the Covid-19 pandemic our members have been on the frontline in all areas of the NHS and as the NHS looks to recover, radiographers are again central to supporting the recovery of elective programmes disrupted by the pandemic providing vital imaging examinations and a diagnosis, and in supporting treatment needs for cancer patients.

Presently, we are losing the recruitment and retention battle. *The diagnostic radiography NHS workforce has been growing steadily at around 3% since 2014, and the therapeutic workforce increasing at around 4% a year.* Current funding and workforce planning appear to assume a continued growth of around 3% a year. However, NHSE figures show, if the Richards' report and other elements of the Imaging Strategy are accepted then staffing levels will need to rise by a further **18% in Diagnostics** and **16% in Therapeutics** between 2021 and 2026. This translates into the *Diagnostic radiography workforce needing to grow by 6% a year, or double the current funded projections, each year until 2026 – a 28% growth in total.*

NHSE and HCPC figures show student numbers are continuing to increase (Figure 2 below). *The 2020-21 intake of students in England equated to 5.2% of the whole current registered diagnostic radiography workforce.* The equivalent in therapeutic radiography is 7.8%. This is encouraging but unlikely to be enough. *It is short of the 6% a year known to be currently needed for diagnostics.* *Leaver rates for the NHS diagnostic radiography workforce in 2021 were also 5.2%.* Unless fewer people leave; and/or more are recruited from new sources (such as internationally) this will not be enough to sustain the necessary workforce growth. Figure 2 below also shows the reliance on the HEE International Overseas recruitment programme.

Figure 2
HCPC Registered Radiographers (as of 13 January 2022)

	England	Scotland	Wales	NI	Total
Diagnostic	25005	2310	1539	1158	31551
Therapeutic	4405	429	271	229	5334

Total	29410	2739	1810	1387	36885
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/ % from overseas

	England	Scotland	Wales	NI	Total
Diagnostic	3993 (15.7%)	100 (4.3%)	72 (4.7%)	21 (1.8%)	4186 (13.3%)
Therapeutic	288 (6.5%)	11 (2.5%)	4 (1.5%)	2 (0.9%)	305 (5.7%)
Total	4281 (14.5%)	111 (4%)	76 (4.2%)	23 (1.6%)	4491 (12.2%)

HISTORIC GROWTH

NHSE figures from 2021 show:

Diagnostic radiography workforce *growing* on a steady average of 3% p/a since 2014

Therapeutic radiography workforce *growing* on a steady average of 4% p/a since 2014

Student Radiography Numbers:

Figure 3 below shows data for the student intake in 2020-21 England (provided from SoR Workforce survey and information provided by Higher Education Institutions) for Diagnostic Radiography and Therapeutic Radiography pre-registration programmes. Most pre-registration programmes are 3 years in length. Upon complete Students are eligible to apply to the HCPC for registration. This is a requirement to practice as a radiographer within the UK.

Figure 3

Yr 1 intake:

Diagnostic: 1254 (Sept-Oct) 45 (Jan) Total = 1299

As % of current workforce = 5.2%

Therapeutic: 325 (Sept-Oct) 17 (Jan) Total = 342

As % of current workforce = 7.8%

NHS long term workforce planning has been based on presumption of continued growth at around 3% p/a

Funding for new places is likewise linked to a 3% assumed growth in Trusts

It is unclear if these figures have yet been adjusted in recognition of initiatives accepted by Government, such as the Richards' report recommendations.³

A forecast predicted need in diagnostic radiography (as identified by NHSE figures) shows a growth of 18% above the forecast is needed between 2021 and 2026. The Therapeutic gap is an additional 16%.

This translates to the diagnostic radiography workforce needing to grow by 6% a year (or double current projections from now until 2026 (28% in total)

Therefore the number recruited into training in England is still not enough, even if it is more, with no scope for students dropping out or graduates not taking up places in England's NHS.

Clinical staff across the country, via a comprehensive survey have identified current staff shortages as a barrier to providing efficient cancer treatments and excellent patient experience.² This results in:

- Increased waiting time for diagnosis & treatment
- Missed opportunities for service improvement
- Insufficient capacity to undertake clinical research

- Downgrading of patient experience
- Competition for scarce staff numbers in the local labour market
- Workforce shortages limiting the capacity of services to plan for the future
- Inefficient use of the workforce skills and experience
- Decreased staff wellbeing and morale resulting in highly skilled staff leaving Radiography

Following findings from the Vision for Radiotherapy 2014-2024 document⁴, we are supportive of the radiotherapy service re-organisation into networks by NHS England to support improvements in care for patients. This has empowered Oncology services with a loco-regional approach to understand the needs of their patients and develop capacity and capability appropriately for that population. This is to support change where this improves services for patients and delivers cost efficiency. However this also requires additional investment in the following

- Investment for additional capacity is of key importance
- When new evidence-based treatments are being tested and evaluated – additional financial support required
- Quality assurance and trials – excellent groups exist and ongoing support required, for example [RTTQA](#) and [NCRI CTRAD](#)
- Workforce capability and numbers

4.2 NHS England by radiotherapy network partnership

Table 2 shows the situation in England by radiotherapy network partnership. Each network includes at least two NHS radiotherapy providers and is aligned to cancer alliance(s). The Thames Valley / Wessex network has the highest current vacancy rate at 17.4%, which is over twice the English average.

Radiotherapy network partnership aligned to cancer alliance(s)	WTE	Headcount	Vacant WTE	Vacancy rate
East Midlands	232.4	272	11.1	4.8%
East of England	278.6	313	25.2	9.1%
Humber, Coast and Vale West Yorkshire South Yorkshire, Bassetlaw, North Derbyshire and Hardwick	267.4	293	24.5	9.2%
Lancashire and South Cumbria Greater Merseyside Cheshire and Merseyside	427.5	485	21.3	5.0%
North Central and North East London	261.2	275	12.6	4.8%
North East and Cumbria	147.1	163	6.2	4.2%
North West and South West London Surrey and Sussex	312.8	333	28.6	9.1%
Peninsula Somerset, Wiltshire, Avon and Gloucestershire	295.6	322	18.6	6.3%
South East London Kent and Medway	184.1	188	17.0	9.2%
Thames Valley Wessex	296.5	287	51.5	17.4%
West Midlands	255.6	273	21.1	8.2%
NHS England	2958.9	3204	237.7	8.0%

Table 2 NHS radiotherapy radiographic workforce establishment WTE, headcount, vacant WTE and vacancy rate by English radiotherapy network partnership (n=52)

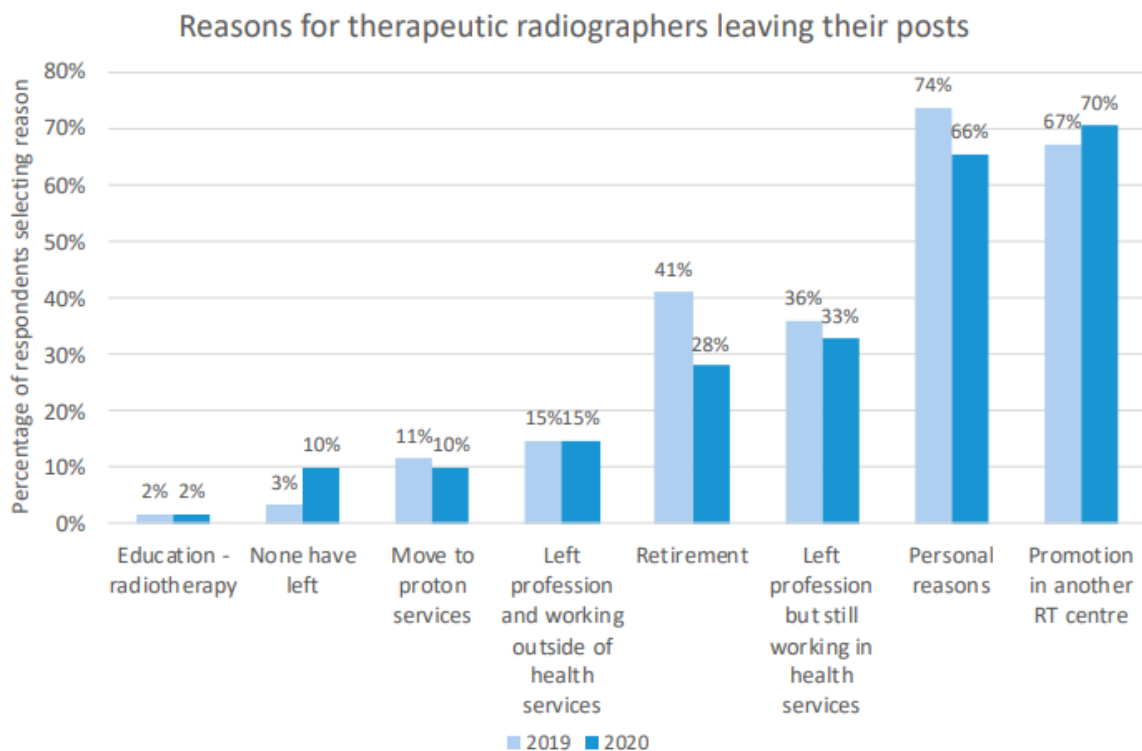
2020 Census data ⁵

Figure 4.2 above shows the vacancy rate for the NHS radiotherapy radiographic workforce is 7.7% with 271.0 WTE radiotherapy radiographic positions vacant. This is the highest recorded vacancy rate since SoR began collecting data in this format in 2012. The rate grew by 1.6% between 2018 and 2020: from 6.1% in 2018 to 7.7% in 2020.

As of the census date in 2020, 36% of respondents were using agency therapeutic radiographers. This compares with 34% in the 2019 edition of the census. The most frequently selected reason for using agency staff is existing vacancies in the therapeutic radiographer establishment. Most agency therapeutic radiographers are the equivalent of AfC band 6 or higher. Overall, 88% of the agency therapeutic radiographers reported by respondents were trained in the UK.

Radiography is a relatively young profession with our NHS workforce having an average age of around 40, meaning more are under 35 than over 50. Most who leave are not retiring. Between January 2016 and the end of 2020, 8952 radiographers joined the NHS from within the UK, either as new starters, re-joiners or people who had qualified from within the NHS. IN the same period 6894 left (77% of the joining figure).

Figure 8 shows that the most common reasons selected by radiotherapy providers for therapeutic radiographers leaving posts are personal circumstances and promotion in another radiotherapy centre.



Most recent data for staff leavers and turnover : In December 2021, the Retention lead from the People Directorate | NHS England & NHS Improvement shared information as follows:-

NHSe National Retention Programme provided specific information and data about the factors impacting retention for the professions of Diagnostic and Therapeutic radiography

For Diagnostic Radiography NHSe stated the following

- The overall leaver rate for Radiography (Diagnostic) in May 2021 was 5.3% (814); turnover was 7.1% (1094) (Fig 1).
- Reductions in both leaver and turnover rates have been seen since the pandemic began in March 2020 (Fig 1) however this is starting to increase.

- The highest leaver numbers are amongst the 25-29 year olds, followed by the 55-60 year olds (Fig 2).
- 45% of the workforce are under the age of 35
- Every age group has seen an increase in numbers in the past five years except for the 50-54 age group

For Therapeutic Radiography NHS3 stated the following

- The overall leaver rate for Therapeutic Radiographers in May 2021 was 4.3% (132); turnover was 9.8% (304) (Fig 1). The leaver rate has since increased to 4.43% in July 2021.
- Reductions in both leaver and turnover rates have been seen since the pandemic began in March 2020 (Fig 1) however this is starting to increase, especially turnover rates
- The highest leaver numbers are amongst the 25-29 year olds, followed by the under 25s – then the 55-60 year olds (Fig 2).
- 52% of the workforce is under the age of 35 Every age group has seen an increase in numbers in the past five years except for the 50-54 age group and the 60-64 age group

2. Diagnostics

Information about Diagnostic Radiography and Imaging is included in *Italics* throughout the document.

3. Living well with and beyond cancer

SoR are committed to ensure patients voices are embedded within cancer policy, cancer information and as an organisation we are keen to see ongoing work in supporting the ambition within the cancer plan relating to living well and beyond cancer

There is an established [Patient Advisory Group](#) but we recognise there is much more work to be done in this area and are very keen to work with key national stakeholders, charities and research funding bodies in understanding and implementing best evidence based practice across the patient pathway. ⁶

Access for more patients to participate in research trials; requires investment in the numbers of and skills of the Therapeutic Radiography workforce at post registration level. Workforce transformation is essential to capitalise on implementation of new roles at advancing levels, included advanced and consultant practitioners. These roles together with clinical academic radiographers within clinical imaging and radiotherapy will both create the capacity to transform care for patients as part of the multi-professional team, supporting radiologists and oncologists, and will also support and enable service research to flourish across the entire clinical imaging and radiotherapy services. This in turn will provide the much-needed evidence to inform service development.

4. Innovation and technology

The current tariff system is challenging and slow to evolve and risks disincentivising innovation. A more responsive Tariff system to support innovation and deliver improved care is required to drive change.

Access for more patients to participate in research trials; requires investment in the research workforce and clinical academic radiographers within clinical imaging and radiotherapy to create the capacity for research to flourish across the entire clinical imaging and radiotherapy services. This in turn will provide the much-needed evidence to inform service development.

Growing leadership by protecting and encouraging leaders

Another reason why both diagnostic and therapeutic radiography struggles is the relatively small number of leadership posts in the NHS from the radiography disciplines. ESR and our own data indicate that whilst the number of radiographers has grown as a whole since 2015, the number of radiographers in post at or above Band 8b has remained static, and so fallen as a percentage of the radiographic workforce as a whole.

Without investment in strong diagnostic and therapeutic radiography professional leadership services are slower to implement new technologies and innovate to optimise the patient pathway, and less likely to retain the Radiography workforce.

Appendix 1 - Further information

Staff turnover in Therapeutic Radiography services can significantly impact service provision.

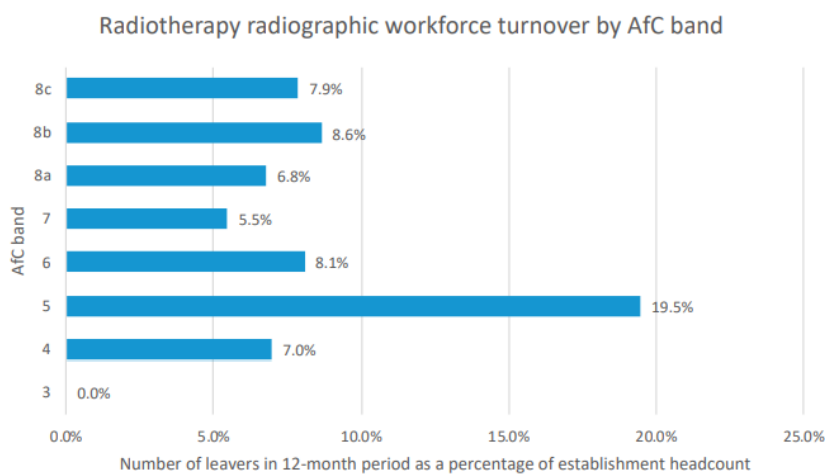


Figure 7 Radiotherapy radiographic workforce turnover by AfC band (n=61)

SCoR 2020 Census data/

There are 62 NHS providers of radiotherapy services in the UK delivered across 11 Operational delivery networks in England

Radioographers in England Leaver and Turnover data

Career Stages

- 25-29 year olds have the highest leaver numbers in both D&T Radiography
- Leaver numbers are lowest in the 45-49 and 50-54 age groups
- Leaver rates are **lowest** between the ages of 40yrs-54yrs. *Then there is a significant increase of 6% in Diagnostic Radiography and an increase of 9% in Therapeutic Radiography*
- Turnover rates are **lowest** for the 50-54yrs in *Diagnostic Radiography* and 45-49 in *Therapeutic Radiography*

Agenda for Change Banding

- **Diagnostic Radiography**
AfC 5 has the highest leaver rate (6.1%)
- **Therapeutic Radiography**
AfC 5 has the highest leaver rate (6.2%)

Length of Service

- **Diagnostic Radiography**
Highest percentage of leavers had less than 1 yr service (7.8%) and 4-5 yrs service (7.6%)
- **Therapeutic Radiography**
Highest percentage of leavers had less than 1 years service (7.1%) and 2-3 yrs service (7.2%)

NB In both *Diagnostic* and *Therapeutic Radiography* – those with 15-20 years service have the lowest leaver rates. *Diagnostic* is 3.3% and *Therapeutic* is 2.1%

NHSe retention lead stated the following actions are required by service to support improvements to the retention rate - these are clear recommendations that require wide implementation

- a) Early Stage Career
 - Preceptorship
 - Buddying
 - Mentoring
 - Wellbeing support
 - Timely conversations

- b) Late Stage Career
 - Pension Support & advice
 - [We are Recognised and Rewarded](#)
 - Flexibility
 - Wellbeing – Menopause
 - Timely conversations

- c) Flexible Working
 - Key enabler
 - Portfolio careers
 - Explore different options
 - Regular conversations
 - Timewise

- d) System ICS Working
 - The Richards report is clear that the service needs to be inclusive of services that are provided as a system
 - Digital Passport

- e) Health and Wellbeing
 - Wellbeing conversations
 - H&WB guides for AHPs
 - Menopause support

- f) Reward and Pensions
 - Promote options available
 - Flexible retirement
 - Timely conversations
 - Pension Webinars
 - EVP

- g) Value and Sense of Belonging
 - Explore ways for Radiographers to promote their profession
 - Case studies

- h) Career Development and Progression
 - Scope for Growth
 - Promote different opportunities
 - [Education and Career Framework for the Radiography Workforce | SoR](#) [NB: this is in the process of being updated]

The **RePAIR (Reducing Pre-registration Attrition and Improving Retention)** <https://www.hee.nhs.uk/our-work/reducing-pre-registration-attrition-improving-retention>) **project in 2018** enabled Health Education England to gain an in-depth understanding of the factors impacting on healthcare student attrition and the retention of the newly qualified workforce in the early stages of their careers.⁸ Therapeutic Radiography was one of the four professions that was included as attrition rates from pre-registration programmes were significantly higher than other Allied Health Professions. Recommendations set out what should be done system wide to improve retention.

Subsequently in 2020 SoR project evidenced the opportunity for access to financial support to be streamlined for all healthcare students, including radiotherapy students, requiring additional support, particularly for placement costs. Hardship funds to be rebranded as ‘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.

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5. SoR (2020) Radiotherapy Radiographic Workforce UK Census 2020 Available at: <https://www.sor.org/learning-advice/professional-body-guidance-and-publications/documents-and-publications/reports-and-surveys>
6. Patient Public and Practitioner Partnerships within Imaging and Radiotherapy: Guiding Principles Available at: <https://www.sor.org/learning-advice/professional-body-guidance-and-publications/documents-and-publications/policy-guidance-document-library/patient-public-and-practitioner-partnerships-withi>
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Supporting information

SoR Pay Review Submission (2020) <https://www.sor.org/>

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