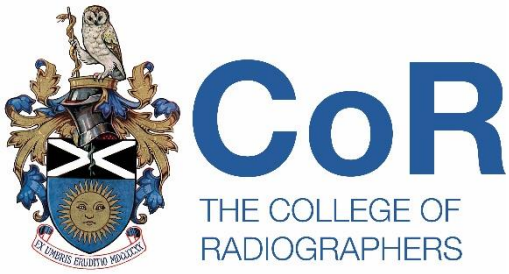
Approval and Accreditation Board

Annual Report 1st September 2020 – 31st August 2021



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1 Foreword

The College of Radiographers (CoR) is pleased to present the Approval and Accreditation Board (AAB) Report for 2020–21. This academic year has continued to be compounded and transformed by the impact of the Covid-19 pandemic and has resulted in a considerable number of influential developments within the field of radiography education. The advance of online/blended learning has continued through the pandemic. The direct impact of a shortage of clinical placements and the Covid-19 pandemic compounded the difficulty to obtain and sustain clinical placement expansion. The re-assessment of A-Level grades, following criticism of the algorithm-generated grades in 2020, increased the number of students entering radiography programmes. All these factors increased the workload and pressure on education institutions (EIs) who must be commended for their endurance and swift adaptability to the unprecedented situation.

The AAB itself adapted to the impact of the pandemic by moving to online virtual Board meetings, which have proved a huge success. This may be one of the positive work stream benefits as more Board members were able to attend, notwithstanding the impact of travel costs and time.

A successful assessor recruitment campaign was also undertaken, as several assessors reached the end of their tenure, and new assessors have been appointed. However, the March 2021 assessor training day could not take place due to Covid-related restrictions and there are on-going discussions on how to best provide future training. Training provision will be reviewed to identify more flexible delivery, help accommodate those wishing to become assessors and reflect the positive changes experienced while remote working as part of the pandemic.

Importantly, the CoR continued working on several key projects including Project Smart. Project Smart will lead to a refresh of the members' continuing professional development (CPD) tool 'CPD Now' and updates to the online application system for individual accreditations; streamlining this system will make it easier for members to complete and submit applications. Pre-registration therapeutic and diagnostic radiographer BSc (Hons) apprenticeship standards have been developed and programme approval has taken place. Notably, the success of the BSc (Hons) Diagnostic Radiography and Imaging Degree Apprenticeship by the University of Exeter expanded into two cohorts per year due to student numbers. The programme team have since successfully developed and pioneered the first MSc Degree Apprenticeship in Diagnostic Radiography, which is due to commence in October 2021.

The Health and Care Professions Council (HCPC) consulted on changes to the Standards of Proficiency and piloted changes to its assessment processes, moving away from events and toward paper-based approvals. The HCPC has also undertaken a scoping exercise relating to possible future regulation of advanced practice.
Discussions were held with Health Education England (HEE) to work toward a reciprocal arrangement for CoR accreditation of advanced clinical practitioners at Master's level.

The CoR, through the AAB, has continued to undertake accreditation and re-accreditation of assistant practitioners, advanced practitioners and consultant practitioners. Approval requests from new providers in respect of pre-registration provision continue to be received. Alongside a considerable number of external factors that have impacted on health education, the AAB has worked to ensure that there is a high standard of consistency when reviewing programmes that lead to eligibility to apply for professional registration as a radiographer, and when reviewing individual learning modules, CPD courses and short education courses. The involvement of the CoR ensures a consistency of standard across the wide variety of programmes and education providers as well as a benchmark of quality and consistency of radiographic standards.

Finally, it is also important to acknowledge and thank CoR assessors from the AAB, as they carry out these reviews to a high and consistent standard. They also act as an important source of information and guidance for education course providers and their knowledge and experience are greatly valued and appreciated.

Yvonne Thackray
Chair of the Approval and Accreditation Board

2 Introduction

The purpose of this report is to draw together the activity of the AAB by including data on the approval and accreditation work of the Board. Data and statistics from the College of Radiographers 2020/21 pre-registration programme survey constitute a significant proportion of the report. The survey is not used by the CoR to monitor education providers. Nor is it the method by which education providers inform or report changes in education provision to the CoR. The data gathered are used by the CoR to inform workforce commissioners and radiography education funders of trends in student applications, retention, support and completion, and to identify examples of innovative practice related to student support both on placement and on campus. Survey findings can also be used as benchmark standards for education providers to review their programmes against.

These data provide a mainly quantitative overview of the position of radiographic education within the United Kingdom (UK). This will enable education providers, including providers of clinical imaging and radiotherapy services, to compare their own data with the national perspective and to extract key areas where they may have further work to do, or areas where they can share their good practice with the rest of the diagnostic and therapeutic radiography community.

This report is almost identical to last year's in structure and data presentation. As with any data-gathering exercise, there are limitations to the conclusions that can be drawn. However, in the interests of clarity and transparency, the limitations have been highlighted with the intention of improving comprehensive data gathering in future years.

Not all pre-registration education providers have returned data for inclusion within this report. Those who did not provide any data were:

Diagnostic radiography programmes
Teesside University – BSc (Hons)
Teesside University – MSc
University of Bradford – BSc (Hons)
University of the West of England – BSc (Hons)

Therapeutic radiography programmes
Kingston University/St George's University of London – BSc (Hons)

Some providers have submitted anomalous or partial data. Where anomalous or partial data has been provided this year or previously, and where it affects year-on-year comparisons, this has been highlighted within the relevant sections of the report. Anomalous data throws into question the reliability and thus the usefulness of the data to both education providers and external stakeholders. Data marked with an asterisk (*) suggests that figures are likely to be higher due to the inclusion of anomalous or partial data.

The AAB and the education team at the CoR wish to thank educational institution colleagues for their help and co-operation in supporting the production of this report. Without their continued support, the data presented would offer less of a complete overview of national radiographic education and thus be of less use to those external organisations that have significant impact upon the provision of diagnostic and therapeutic radiography education. Thank you especially to the vast majority who returned data by the deadline and without prompting. The data collated in this report are used for a variety of purposes, not least in the formulation of the Society and College of Radiographers' policy

and opinion on educational and workforce matters. The report will be distributed widely to education institutions, placement providers and those who commission and fund pre-registration education and practice placements; it will also be available in the Policy and Guidance Document Library on the Society of Radiographers' website.

The AAB anticipate that this year's report will provide plenty of information for consideration and future planning.

2.1 Key points

Some providers did not submit data or provided incomplete data. Within these limitations, the following key points are noted:

1. Applications to diagnostic radiography programmes fell by 0.28%, whilst applications for therapeutic radiography programmes increased by at least 15.5%, compared with last year.
2. Eleven diagnostic radiography education providers recruited to target, eight over-recruited and two under-recruited.
3. Six therapeutic radiography education providers recruited to target, five over-recruited and one under-recruited.
4. Compared with last year, the intake for diagnostic radiography students increased by 9.2% (n=141) and therapeutic radiography student intake increased by 18.9% (n=67), for those programmes where education providers submitted data.
5. Attrition for diagnostic radiography programmes decreased by 4.22% from last year to 11.93%. The highest attrition value recorded was 25.0% for diagnostic radiography.
6. Attrition for therapeutic radiography programmes decreased by 1.34% from last year to 23.21%; however, not all education providers responded. The highest attrition value recorded was 42.86% for therapeutic radiography.
7. More students this year left their diagnostic radiography programme due to financial reasons (9.21%, compared with 6.33% last year).
8. Reasons for attrition from therapeutic radiography programmes were similar to last year. Almost 37% of attrition was due to wrong career choice and not meeting the required academic standards.
9. Across all diagnostic and therapeutic radiography programmes common reasons for attrition were: not meeting the required academic standards (21.05%), health reasons (16.67%), personal circumstances (15.79%) and wrong career choice (14.91%).
10. The number of students exiting with an award granting eligibility to register with the HCPC increased from last year to 1,093 for diagnostic radiography (an increase of 4 students, 0.37%) and to 238 for therapeutic radiography (an increase of 6 students, 2.58%).
11. Nine diagnostic radiography programmes and four therapeutic radiography programmes reported an absence of practice educators to support students while they are on placement. As the use of practice educators was the most common intervention cited to enhance retention, this requires further attention.
12. There was a reduction in individual accreditation for assistant practitioners. Individual accreditation activity across all other levels from practice educator to consultant practitioner increased, compared with last year.

3 Annual data collection

The AAB continues to play a crucial role in collecting, collating and analysing data related to radiography education and training. This report incorporates the data collected for the education provision of diagnostic and therapeutic radiography during the 2020–21 academic year, which ran from 1 September 2020 to 31 August 2021.

Data were collected via the online survey system Alchemer® (previously Survey Gizmo®). An email was sent to each pre-registration programme leader with a link to access the College of Radiographers 2020/21 pre-registration programme survey. A copy of the survey questions was included with the email and this enabled programme leaders to collect the relevant data prior to filling in the survey.

The deadline to complete the survey was extended to 10 January 2022. This date was chosen to ensure that all education providers' final progression boards had taken place and to give programme leaders ample opportunity to gather the required data. However, there were still some students recorded as not having completed their programmes. Each year the education team at the CoR endeavours to make survey questions related to retention and completion as clear as possible. This year further clarification was given to assist education providers in submitting consistent data for deferred students.

Student attrition data are anonymised within this report. Education providers should be able to recognise their own data; if unable to recognise their own data they can ask for the randomised code assigned to them for this report by contacting the Professional and Education department at the Society and College of Radiographers (SCoR): PandE@sor.org.

4 Services to education institutions and students

The CoR provides many services to both education institutions and students. The Professional and Education team deal with most services supporting education providers while students initially fall under the remit of the Student and New Professionals Officer.

This section will highlight the services delivered to education providers and will consider services to students provided through those education providers.

4.1 Education institutions

There were no changes to the fees charged for approval and education services. Education providers who take advantage of the Annual Inclusive Package were able to make use of the following services:

- Consultancy and advice on proposed education developments and provision, and on curriculum developments.
- CoR approval of education programmes delivered by the education provider in accordance with current policies and principles. This includes approval of short courses such as dental radiography and intravenous injection courses.
- Endorsement of up to ten CPD programmes per year (and by negotiation for additional programmes thereafter).
- Full access to the SCoR Policy and Guidance Document Library for all staff of the education institution.
- Inclusion of approved courses on the College of Radiographers' website, which is linked to the radiography careers webpages. Inclusion in other careers and courses information provided by the CoR.
- Copies of periodic (annual) reports with national data on student profiles, education provision and related academic matters.
- Opportunity to participate in the Course Leader Forum, Practice Placement Forum and the Admissions Tutor Forum, and other relevant forums that may be established.
- Access to external mentors for those newly appointed to senior positions, such as programme lead or head of school.
- Access to local mediation services, when required.
- Provision of 'induction to the profession' and other relevant sessions for first, continuing and final year students, to fit in with individual education providers' curricula.
- Induction sessions for other groups by request (e.g. trainee assistant practitioners or qualified practitioners undertaking approved Master's level awards).
- On request, and subject to availability, presentations or lectures by SCoR officers at study days and conferences run by education providers. Invitations should be received at least four months in advance of the event.
- Inclusion in specific professional forums and working groups established from time to time (e.g. the Education and Career Framework or Code of Conduct).

On payment of the relevant fee, these services are individually available to education providers that have not purchased the Annual Inclusive Package.

4.2 Students

The Student Membership Package is similar to the Annual Inclusive Package except that education providers pay £45 per student, per year. It includes all the previously listed services of the Annual Inclusive Package as well as membership for all students.

This package includes the following services:

- Year one students: complimentary membership of the Society of Radiographers (SoR), subject to the student supplying sufficient personal details to enable set up of their membership record.
- Visit or online talk by a SCoR professional officer or regional/national officer within the first two months of course commencement.
- Two further visits or online talks to students by a SCoR professional officer in continuing and final years.
- Students maintaining membership for the whole of their education programme receive six months' complimentary full membership on qualifying.
- Welcome information via the SoR website or in a welcome pack for year one students taking up membership at the start of their programme.
- An electronic (digital) subscription for all students to *Synergy News* (a publication of news and current events relevant to the profession; current issues affecting the practice of radiographers; information on national councils and regional committees, networks, and special interest groups; and features of general interest to the profession). Students are actively encouraged to contribute to *Synergy News*.
- An electronic (digital) subscription to *Imaging & Therapy Practice*, featuring practice-related topics and a range of CPD opportunities. Students are encouraged to contribute their best work to this publication.
- Opportunity to purchase a subscription to printed copies of *Synergy News* and *Imaging & Therapy Practice* at a significantly reduced rate.
- Students receive a monthly e-zine, *Student Talk*, with content particularly relevant to students. Again, student contributions are welcomed.
- Full access to *Radiography*, the profession's peer reviewed journal, via the members' section of the SoR Policy and Guidance Document Library.
- Electronic access to all other publications in the SCoR Policy and Guidance Document Library.
- Full access to the SoR website with dedicated sections for students and a wide range of briefings, advice and guidance materials (some student specific), resources to support practice, career planning advice, learning resources and online job advertisements (available from the time they are placed).
- Full access to CPD Now, the Society of Radiographers' web-based CPD tool.
- Access to online webinars and student welcome sessions.
- Opportunity to follow the profession on Twitter® via @SCoRMembers and @SoRStudentReps.
- Substantially discounted rates for conferences run by SCoR (generally, charges levied are at cost only and a student rate is set for each conference individually).
- A designated membership team as a first port of call and access to a team of professional and regional officers who can provide expert advice on educational, workplace and personal issues. This includes a dedicated Students and New Professionals Officer.

- Indemnity insurance and certificates for clinical placements (including elective and overseas placements, with the exception of North America and Canada) that are part of the university's approved education programme.
- Indemnity insurance for part-time employment as a clinical support worker in diagnostic imaging or radiotherapy or, where appropriate, as an accredited assistant practitioner (subject to this being annotated in the individual's SoR membership record).
- Access to a structure that encourages and supports student involvement in the profession at regional and national level, and in policy development forums. This includes opportunities to:
    - Attend the Annual Student Conference.
    - Become a student representative and join the UK Student Representative Forum, which contributes to the design of resources and support for the student workforce.
    - Become an office holder in the relevant regional committee (RC) or national council (NC).
    - Be part of a RC/NC delegation at the SoR Annual Delegates' Conference (SoR members' policy advisory conference).
    - Be nominated to be an observer in attendance at the UK Council of the SoR.
- Opportunities to join and participate in any of the national networks facilitated by the SCoR (e.g. Equalise, the Society of Radiographers' equality network).
- Opportunity and encouragement to engage with special interest groups recognised by the SCoR.
- Access to the Society of Radiographers' Benevolent Fund, according to its rules.
- Other benefits as they arise from the Society of Radiographers' Student Representatives Forum (which has a remit to review and enhance benefits for students and enable active student engagement in the profession).
- Lobbying on student matters and concerns collectively at UK governmental level and in the four countries of the UK (e.g. on finances, career structures or career development opportunities).

5 Associate and assistant practitioner education programmes

Assistant practitioners continue to be in demand in imaging departments. There are assistant practitioners in radiotherapy departments, but demand is lower. Mammography associate roles have been developed to support the NHS breast screening service.

In England the Healthcare Assistant Practitioner apprenticeship standard is available for delivery at Framework for Higher Education Qualifications (FHEQ) level 5. In 2018 an apprenticeship standard for the role of Mammography Associate was approved for delivery at FHEQ level 4.

5.1 Approval/re-approval of associate and assistant practitioner programmes

During 2020–21 the CoR approved one assistant practitioner programme related to imaging healthcare assistant practitioners and granted the extension of three existing approvals (Table 1). There were no approval requests received relating to associate programmes.

Education Institution	Programme type	Award
Queen Margaret University	Extension of approval	Cert HE Mammography
Robert Gordon University	Full approval	Cert HE Radiographic Studies
University of Leeds	Extension of approval	Cert HE Diagnostic Imaging Studies
University of Derby	Extension of approval	AP to Radiographer Bridging Programme

Table 1 Table showing education institutions that had programmes related to assistant practitioners approved during the academic year 2020–21.

6 Pre-registration programmes

Programme data collected via the College of Radiographers 2020/21 pre-registration programme survey relates to pre-registration programmes only. Each education provider is asked to submit data for every programme they have had approved by the CoR. However, some approved programmes have never run or have ceased to run within the lifetime of the approval. Table 2 shows a breakdown of all CoR approved pre-registration programmes.

	BSc (Hons) / MRad (full time)	**PgD / MSc (full time)**	**BSc (Hons) Degree Apprenticeship**
Diagnostic radiography	24	5	3
Therapeutic radiography	12	5	0

Table 2 Table showing the type and number of pre-registration programmes approved by the CoR.

Pre-registration programme approvals constitute the majority of the work undertaken by AAB assessors. This year there were three diagnostic radiography and two therapeutic radiography programmes approved/re-approved by the CoR. One diagnostic radiography programme had changes to modules approved. In addition, the CoR approved one new Diagnostic Radiography BSc (Hons) integrated degree apprenticeship programme.

6.1 Approvals/re-approvals of pre-registration programmes

The number of pre-registration programmes approved each year varies depending on the education providers' re-validation cycles. AAB approval typically lasts for five years. The Board is sympathetic to education providers who request an extension of one year to enable the programme to fit with their institution cycles, which can be six years, or to fit with other programmes they run as long as this is requested during the approval period.

Table 3 shows a comparison of the number of full pre-registration programmes approved/re-approved in this and previous years. It includes undergraduate, postgraduate and degree apprenticeship approvals leading to eligibility to apply for registration with the HCPC. This table does not include requests for approval of additional placements, new campus facilities or approval extensions.

Modality	Number of programmes approved 2016–17	Number of programmes approved 2017–18	Number of programmes approved 2018–19	Number of programmes approved 2019–20	Number of programmes approved 2020–21
Diagnostic radiography (undergraduate and postgraduate)	3	4	5	5	3
Diagnostic radiography (degree apprenticeship)	n/a	n/a	n/a	2	1
Total diagnostic radiography	**3**	**4**	**5**	**7**	**4**
Therapeutic radiography (undergraduate and postgraduate)	3	2	2	4	2
Therapeutic radiography (degree apprenticeship)	n/a	n/a	n/a	0	0
Total therapeutic radiography	**3**	**2**	**2**	**4**	**2**

Table 3 Table comparing full pre-registration programme approvals during the academic years 2016–21.

Details of education providers who had complete pre-registration programmes approved, approval extended or adapted are shown in Table 4. This provision includes approval of an overseas programme for professional purposes.

Education Institution	Programme type	Award
City, University of London	Extension of approval	BSc (Hons) Radiography (Diagnostic Imaging)
City, University of London	Extension of approval	BSc (Hons) Radiography (Radiotherapy & Oncology)
De Montfort University	Full approval	BSc (Hons) Diagnostic Radiography
London South Bank University	Extension of approval	BSc (Hons) Diagnostic Radiography
London South Bank University	Extension of approval	BSc (Hons) Therapeutic Radiography
Queen Margaret University	Full approval	Master of Radiography: Diagnostic
Queen Margaret University	Full approval	Master of Radiography: Therapeutic
Sheffield Hallam University	Full approval	BSc (Hons) Diagnostic Radiography (Degree Apprenticeship)
University of Derby	Extension of approval	MSc Diagnostic Radiography
University of Exeter	Approval of module adaptation	BSc (Hons) Medical Imaging (Diagnostic Radiography)
University of Gloucestershire	Full approval	BSc (Hons) Diagnostic Radiography
University of Leeds	Extension of approval	BSc (Hons) Diagnostic Radiography
University of Liverpool	Full approval	PgD Radiotherapy
University of Salford	Extension of approval	BSc (Hons) Diagnostic Radiography
University of Sharjah	Full approval	BSc Medical Diagnostic Imaging

Table 4 Table showing education institutions that had full pre-registration programme approvals, approvals extended or adapted during the academic year 2020–21.

Education providers with CoR approved programmes are required to obtain approval by the CoR for major programme changes, new campus facilities and additional placements or placement sites. Table 5 shows the education providers who had new placements or facilities approved during 2020–21.

Education Institution	Approval granted
Cardiff University	BSc (Hons) Diagnostic Radiography and Imaging – approval of one new clinical placement provider and increases in capacity at four placement providers
Keele University	BSc (Hons) Radiography (Diagnostic Imaging) – approval of six new clinical placement providers
University of Cumbria	BSc (Hons) Diagnostic Radiography – approval of increase in capacity at one clinical placement provider
University of Derby	BSc (Hons) Diagnostic Radiography/MSc Diagnostic Radiography – approval of three new clinical placement providers
University of the West of England	BSc (Hons) Diagnostic Radiography – approval of one new clinical placement provider
University of the West of England	BSc (Hons) Radiotherapy & Oncology – approval of two new clinical placement providers

Table 5 Table showing education institutions that had new placements or facilities approved during the academic year 2020–21.

6.2 Duration of pre-registration radiography programmes

In the academic year 2020–21 there were 26 education providers offering CoR approved pre-registration programmes in diagnostic radiography and 13 in therapeutic radiography. These education providers offer a range of programmes including degree apprenticeships (Table 2).

Table 6 shows the number of pre-registration education programmes that are currently approved by the CoR. Some of these programmes may not have run during 2020–21. Some education providers offer both undergraduate and postgraduate programmes.

Programme duration	Number of pre-registration programmes in diagnostic radiography	Number of pre-registration programmes in therapeutic radiography
2 or 3 years (postgraduate)	4	5
3 or 4 years (undergraduate) **including degree apprenticeships**	29	13

Table 6 Table showing the number and duration of CoR approved diagnostic and therapeutic radiography pre-registration programmes available during the academic year 2020–21.

6.3 College of Radiographers approved placements

The CoR approves education providers and their placement partners to educate a specific number of students. The limiting factor in terms of numbers of students on each programme can be the overall placement capacity; in Scotland, Northern Ireland and Wales the number of students funded/allocated is an additional limiting factor. Placements must be able to provide a supportive and high-quality clinical learning environment for students. Currently the CoR does not specify how

assessors check this, though the *Quality Standards for Practice Placements* (College of Radiographers, 2012) must be adhered to. Best practice includes audit and review of the clinical learning environment and the provision of practice educators. Audit should include 360° feedback from the education provider, placement manager and students as a minimum. As part of the approval process assessors will typically meet with the placement providers to determine the placement capacity, sustainability and quality of provision.

From 1 August 2017 Health Education England (HEE) ceased commissioning students in England. However, HEE still commissions placements and provides funding through the Education and Training Tariff (ETT). Most imaging and radiotherapy departments report being unable to access the ETT as it is paid to top-level finance departments rather than the placement departments. The SCoR have been raising awareness of the ETT for a number of years with department managers, practice educators and education providers. HEE has recognised the problem and began piloting 'place-based' tariffs in a small number of sites from the academic year 2018 (Health Education England, n.d.).

In the *Quality Standards for Practice Placements* (College of Radiographers, 2012) the CoR mandates that there must be robust placement agreements between the education providers and the placement hosts, and tripartite placement agreements where the placement is shared by more than one education provider. The CoR also mandates that the quality of the placement and the support provided must be audited at least annually.

In 2020–21 the Covid-19 pandemic affected how some placements were able to support radiography students. The CoR worked closely with education providers and HEE to ensure that, where possible, student experience and clinical learning continued as restrictions eased. Strategies and support were developed to advise education providers, students and clinical staff, while encouraging innovation and delivery adaptation, and ensuring quality of clinical placements (Covid-19 hub).

6.4 Commissioned, funded or allocated students

The commissioning, funding or allocation mechanisms are different within each of the countries of the UK (Table 7).

Country	Commissioning/funding/allocation model
England	From 1 August 2017 HEE commissions and fundseo placements only. Education providers are free to decide how many students they accept onto the programmes based on capacity and resources. However, the number of placements can still be a limiting factor.
Northern Ireland	The Department of Health, Social Services and Public Safety commissions students based on workforce policy and advice from professional bodies and other key stakeholders.
Scotland	The Scottish Funding Council allocates students. Funding is distributed to the education providers who decide how many students to recruit based on specific workforce shortages.
Wales	Health Education and Improvement Wales (HEIW), established on 1 October 2018, includes Workforce, Education and Development Services (WEDS). WEDS advises the Welsh Government annually of the number of healthcare training

	places required to meet current and future NHS Wales workforce needs. All students who have secured an NHS Wales funded place on a course have their tuition fees paid. Students may also be entitled to a salary or bursary.

Table 7 Table showing the commissioners, funders and allocators for student education in the UK.

Data for commissioned, funded or allocated places is no longer collected, as reported in 2019–20.

6.5 UCAS points

This element has been included in the report for the past three years. It is intended to enable education providers to compare their admission points requirements with those of other education providers.

A full list of the UCAS points accepted by education providers can be found in Appendix A and Appendix B.

6.5.1 Diagnostic radiography admission points

Diagnostic radiography admission points were reported to range from 108 to 220 points. It is likely that the top figure in this range is a typographical error as the entry requirements on the university's web page state 120 points.

The median points value was 120 points.

The mode points value was 120 points. Thirteen universities (54.1%) responding had this points requirement.

6.5.2 Therapeutic radiography admission points

Therapeutic radiography admission points were reported to range from 108 to 120 points.

The median points value was 120 points.

The mode points value was 120 points. Seven universities (63.6%) responding had this points requirement.

6.6 Applications received

A summary of UK data for applications received to diagnostic and therapeutic radiography programmes has been provided below, followed by country-specific data. The full data set can be found in Appendix C and Appendix D.

Data have been presented as reported by education providers. Where anomalous or partial data were provided, this has been noted.

6.6.1 Diagnostic radiography applications – UK

It appears as though there has been a slight decrease (0.28%) in diagnostic radiography applications compared with last year; however, data for four diagnostic radiography programmes were not submitted, compared with missing data for three programmes last year. Without a full data set year-on-year, it is not possible to draw any conclusions regarding applications to diagnostic radiography programmes and the data in Table 8 should be viewed with caution.

Data	2017–18	2018–19	2019–20	2020–21
Applications	10,314*	9,178*	8,728*	8,703*

*Table 8 Table showing the number of applications for diagnostic radiography in the UK during the academic years 2017–21. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

6.6.2 Diagnostic radiography applications – England

Data	2017–18	2018–19	2019–20	2020–21
Applications	8,429*	7,680*	7,067*	7,028*

*Table 9 Table showing the number of applications for diagnostic radiography in England during the academic years 2017–21. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

It appears that applications to diagnostic radiography programmes in England have decreased by less than 1% from last year; however, this is difficult to determine due to missing data for four programmes from three institutions. Table 9 presents figures based on the data that were submitted.

6.6.3 Diagnostic radiography applications – Wales

Data	2017–18	2018–19	2019–20	2020–21
Applications	800	677	606	595

Table 10 Table showing the number of applications for diagnostic radiography in Wales during the academic years 2017–21.

All education providers in Wales submitted data so it is clear to see in Table 10 that there has been a decrease of less than 2% in applications to diagnostic radiography programmes in Wales this year.

6.6.4 Diagnostic radiography applications – Scotland

Data	2017–18	2018–19	2019–20	2020–21
Applications	873	591*	912	940

*Table 11 Table showing the number of applications for diagnostic radiography in Scotland during the academic years 2017–21. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

All institutions in Scotland submitted data, which show a 3% increase in diagnostic radiography applications compared with the previous year (Table 11).

6.6.5 Diagnostic radiography applications – Northern Ireland

Data	2017–18	2018–19	2019–20	2020–21
Applications	212	230	143	140

Table 12 Table showing the number of applications for diagnostic radiography in Northern Ireland during the academic years 2017–21.

All institutions in Northern Ireland submitted data. Diagnostic radiography applications in Northern Ireland have decreased by 2.1% since last year, as shown in Table 12.

6.6.6 Therapeutic radiography applications – UK

One therapeutic radiography education provider with a BSc (Hons) programme did not provide data. Therefore, it is possible to say with confidence that the number of therapeutic radiography applications has increased by at least 15.5% since 2019–20, as shown in Table 13.

Data	2017–18	2018–19	2019–20	2020–21
Applications	1,857	1,420*	1,672*	1,931*

*Table 13 Table showing the number of applications for therapeutic radiography in the UK during the academic years 2017–21. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

6.6.7 Therapeutic radiography applications – England

Data	2017–18	2018–19	2019–20	2020–21
Applications	1336	923*	1,028*	1,336*

*Table 14 Table showing the number of applications for therapeutic radiography in England during the academic years 2017–21. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

One therapeutic radiography education provider with a BSc (Hons) programme did not provide data. Therefore, it is possible to suggest that the number of therapeutic radiography applications in England has increased by approximately 29.96% since 2019–20, as shown in Table 14.

6.6.8 Therapeutic radiography applications – Wales

Data	2017–18	2018–19	2019–20	2020–21
Applications	133	129	159	219

Table 15 Table showing the number of applications for therapeutic radiography in Wales during the academic years 2017–21.

Applications for therapeutic radiography in Wales have increased by 37.74% since 2019–20, as shown in Table 15.

6.6.9 Therapeutic radiography applications – Scotland

eoData	2017–18	2018–19	2019–20	2020–21
Applications	255	244	342	287

Table 16 Table showing the number of applications for therapeutic radiography in Scotland during the academic years 2017–21.

Applications for therapeutic radiography in Scotland have decreased by 16.1% since last year, as shown in Table 16.

6.6.10 Therapeutic radiography applications – Northern Ireland

Data	2017–18	2018–19	2019–20	2020–21
Applications	133	124	143	89

Table 17 Table showing the number of applications for therapeutic radiography in Northern Ireland during the academic years 2017–21.

Applications in Northern Ireland have decreased by 37.8% since 2019–20, as shown in Table 17.

6.7 Student intake

Although applications to diagnostic and therapeutic radiography programmes have been variable across the UK, the student intake gives an indication of future workforce provision. Again, there are challenges with the accuracy of the data due to non-submissions.

Eleven (39.2%) diagnostic radiography education providers and six (42.8%) therapeutic radiography education providers reported that they had recruited to target.

Two (7.1%) diagnostic and one (7.1%) therapeutic radiography education provider reported that they had under-recruited.

Reasons for under recruitment included one or more of the following:

- Insufficient applications (two diagnostic and one therapeutic radiography programme)
- Fewer applicants achieved necessary grades than expected (one diagnostic and one therapeutic radiography programme)

Eight (28.6%) diagnostic and five (35.7%) therapeutic radiography education providers reported that they had over-recruited.

Reasons for over recruitment included one or more of the following:

- Increased applications (three diagnostic and one therapeutic radiography programme)
- More applicants achieved necessary grades than expected (six diagnostic and five therapeutic radiography programmes)

Data are presented in Table 18 and Table 19 for the student intake from 2017–18 to 2020–21. It is difficult to draw any conclusions from the data due to a number of education providers not responding to the College of Radiographers pre-registration programme survey each year.

Appendix E and Appendix F detail the student intake for each institution for diagnostic radiography and therapeutic radiography programmes respectively.

6.7.1 Diagnostic radiography student intake

Country	2017–18	2018–19	2019–20	2020–21
England	749*	1180*	1179*	1299*
Northern Ireland	54	61	60	77
Scotland	137	77*	170	156*
Wales	29*	111	116	134
Total student intake	**969***	**1429***	**1525***	**1666***

*Table 18 Table showing the number of students starting diagnostic radiography programmes in the UK during the academic years 2017–21. * figures are likely to be higher due to non-submission of data by a number of education institutions.*

6.7.2 Therapeutic radiography student intake

Country	2017–18	2018–19	2019–20	2020–21
England	288*	215*	275*	342*
Northern Ireland	14	15	16	18
Scotland	47	47*	43*	40

Wales	20	21	21	22
Total student intake	**369***	**298***	**355***	**422***

*Table 19 Table showing the number of students starting therapeutic radiography programmes in the UK during the academic years 2017–21. * figures are likely to be higher due to non-submission of data by a number of education institutions.*

6.7.3 International students

If there are placements available which UK or European Union (EU) students have not filled, education providers may choose to take international or other fee-paying students. In previous years this happened rarely, but since 2018–19 there has been an increase in international student admissions. In 2020–21, an additional fifteen international students in England were recruited to diagnostic radiography programmes compared to 2019–20, while there was a decrease of three students in Scotland.

The number of international students recruited in 2020–21 is shown for diagnostic radiography in Table 20 and for therapeutic radiography in Table 21.

6.7.3.1 Diagnostic radiography international students

Country	2017–18	2018–19	2019–20	2020–21
England	8	13	17*	32*
Northern Ireland	0	1	1	0
Scotland	2	0	5	2
Wales	0	0	0	0
TOTAL	**10**	**14**	**23***	**34***

*Table 20 Table showing the number of international students admitted to diagnostic radiography programmes in the UK during the academic years 2017–21. * figures are incomplete due to anomalous or non-submission of data by several education institutions.*

6.7.3.2 Therapeutic radiography international students

Compared with last year, the number of international students admitted to therapeutic radiography programmes increased by five in England and decreased by one in Scotland; however, one therapeutic radiography education provider did not respond to the survey.

Country	2017–18	2018–19	2019–20	2020–21
England	6	8	5*	10*
Northern Ireland	0	0	0	0
Scotland	1	0	1	0
Wales	0	2	2	0
TOTAL	**7**	**10**	**8***	**10***

*Table 21 Table showing the number of international students admitted to therapeutic radiography programmes in the UK during the academic years 2017–21. * figures are incomplete due to anomalous or non-submission of data by several education institutions.*

6.8 Student attrition from pre-registration programmes

Comparisons can be drawn between survey data from 2019–20 and this year's data with regards to student attrition. However, these data may not be comparable with those reported by education funders and allocators, or placement commissioners in England, owing to differences in defining and calculating 'attrition'. The CoR does not include transfers in its calculation and instead prefers to consider that a student wishing to leave one institution constitutes attrition. If that student then joins the equivalent programme at another institution this may lead to strengthening of that cohort – positive attrition.

Attrition has been calculated using the following formula:

$$Attrition = \frac{S_o - (S_c + S_r)}{S_o} \times 100\%$$

S_o = Number of students starting the programme

S_c = Number of students who have completed the programme in 2020–21

S_r = Number of students who were referred/deferred at the qualifying assessment board but are still due to complete

Data were collected using the College of Radiographers 2020/21 pre-registration programme survey to determine pre-registration attrition from the following cohorts of students:

- 4-year BSc (Hons) starting in the academic year 2017–18 in Scotland
- 3-year BSc (Hons) starting in the academic year 2018–19 in the rest of the UK
- 2-year PgD/MSc starting in the academic year 2019–20 in the UK

An anonymised table of attrition by programme has been produced that shows attrition changes compared to the previous year. This table can be found in Appendix G.

6.8.1 Diagnostic radiography attrition

Figures in Table 22 are based on submitted data only. Four education providers did not submit any data.

Intake	Total started	Total completed	Total still to complete	Total attrition
BSc (Hons) and PgD/MSc	1315	1098	60	11.93%

Table 22 Number of students that started, completed and are still to complete Diagnostic Radiography BSc (Hons) and PgD/MSc programmes in the UK leading to the total attrition for diagnostic radiography.

Based on submitted data only, diagnostic radiography student attrition has decreased from last year (Figure 1).

Attrition from diagnostic radiography programmes ranges from 1.39% to 25.00%. Eleven education providers (52.3%) have attrition of 10% or more.

6.8.2 Therapeutic radiography attrition

Figures in Table 23 are based on submitted data only. One education provider did not submit any data.

Therapeutic radiography student attrition has decreased slightly from last year (Figure 1); however, not everyone provided data so it is difficult to make assumptions.

Intake	Total started	Total completed	Total still to complete	Total attrition
BSc (Hons) and PgD/MSc	349	238	30	23.21%

Table 23 Number of students that started, completed and are still to complete Therapeutic Radiography BSc (Hons) and PgD/MSc programmes in the UK leading to the total attrition for therapeutic radiography.

Attrition for therapeutic radiography programmes ranges from 2.50% attrition to 42.86%. Ten education providers (71.4%) have attrition of 10% or more.

6.8.3 Comparison of attrition data – diagnostic and therapeutic radiography

Attrition data can be compared directly with previous AAB survey reports and is shown in Figure 1.

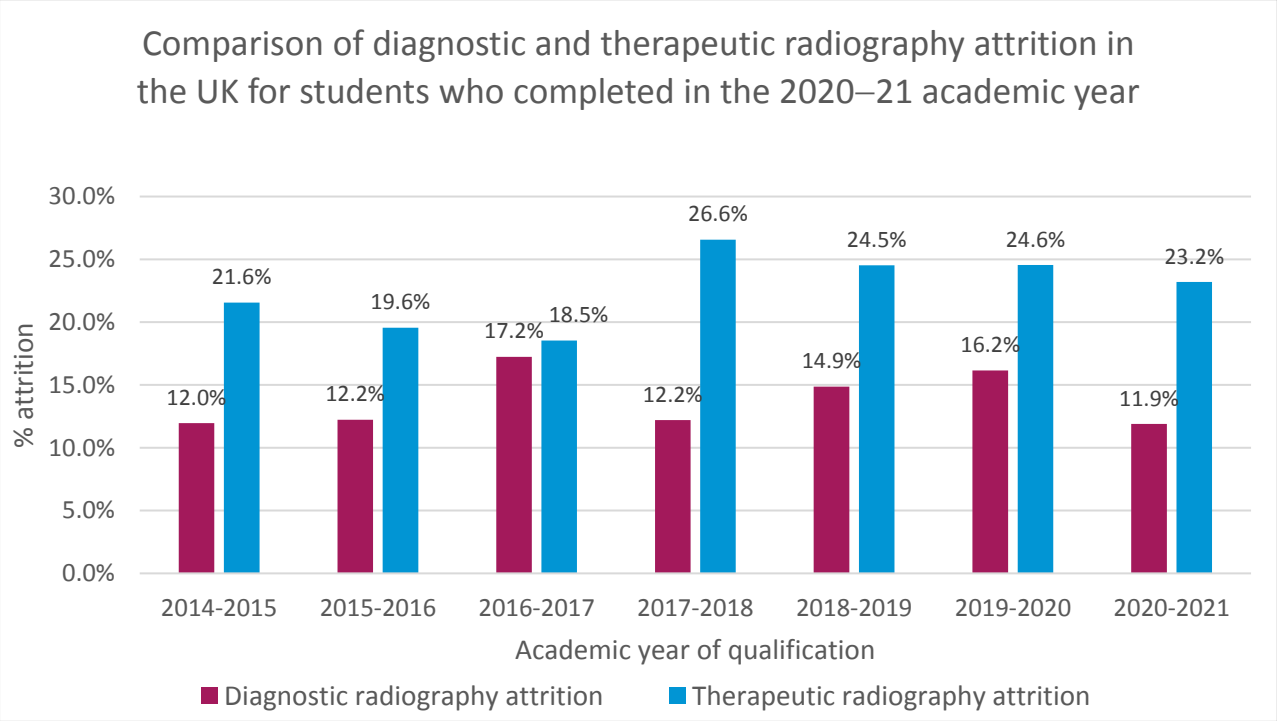

Figure 1 Chart showing a comparison of diagnostic and therapeutic radiography attrition.

6.8.4 Reasons students did not complete pre-registration programmes

All data presented in this section come from the College of Radiographers 2020/21 pre-registration programme survey. Comparison with other SCoR surveys is outwith the scope of this report. Reasons given for students leaving diagnostic and therapeutic radiography programmes are shown in Figure 2 and Figure 3.

There are several points to note regarding these data:

- It is tertiary information. It would be very challenging to obtain the primary reason students have left from the ex-students themselves. Obtaining the data from course leaders via the annual survey is the best alternative.
- The annual survey does not ask specifically about bullying and this was not mentioned in any of the 'other' responses.
- One education provider noted that some students do not disclose their reasons for leaving a programme.

- It is recognised that students very rarely leave due to one single reason. Often a combination of issues eventually make students decide to leave a programme. Consequently, Figure 2 and Figure 3 do not show the number of students who left for each reason provided.
- When students defer the year, they count as attrition for this year but next year will count as an addition to that cohort.

6.8.4.1 Reasons students left diagnostic radiography programmes

This year, failure to meet the required academic standards was again the most prevalent reason for students not completing diagnostic radiography programmes (22.37%). After that, the most prevalent reasons given were health reasons (18.42%), followed by personal circumstances and wrong career choice (both 13.16%). More students left their diagnostic radiography programmes due to financial reasons (9.21%, compared with 6.33% last year). Fewer students left due to wrong career choice compared with the last two years, where it accounted for over 16% of students leaving. Worryingly one diagnostic radiography student left their course due to placement experience.

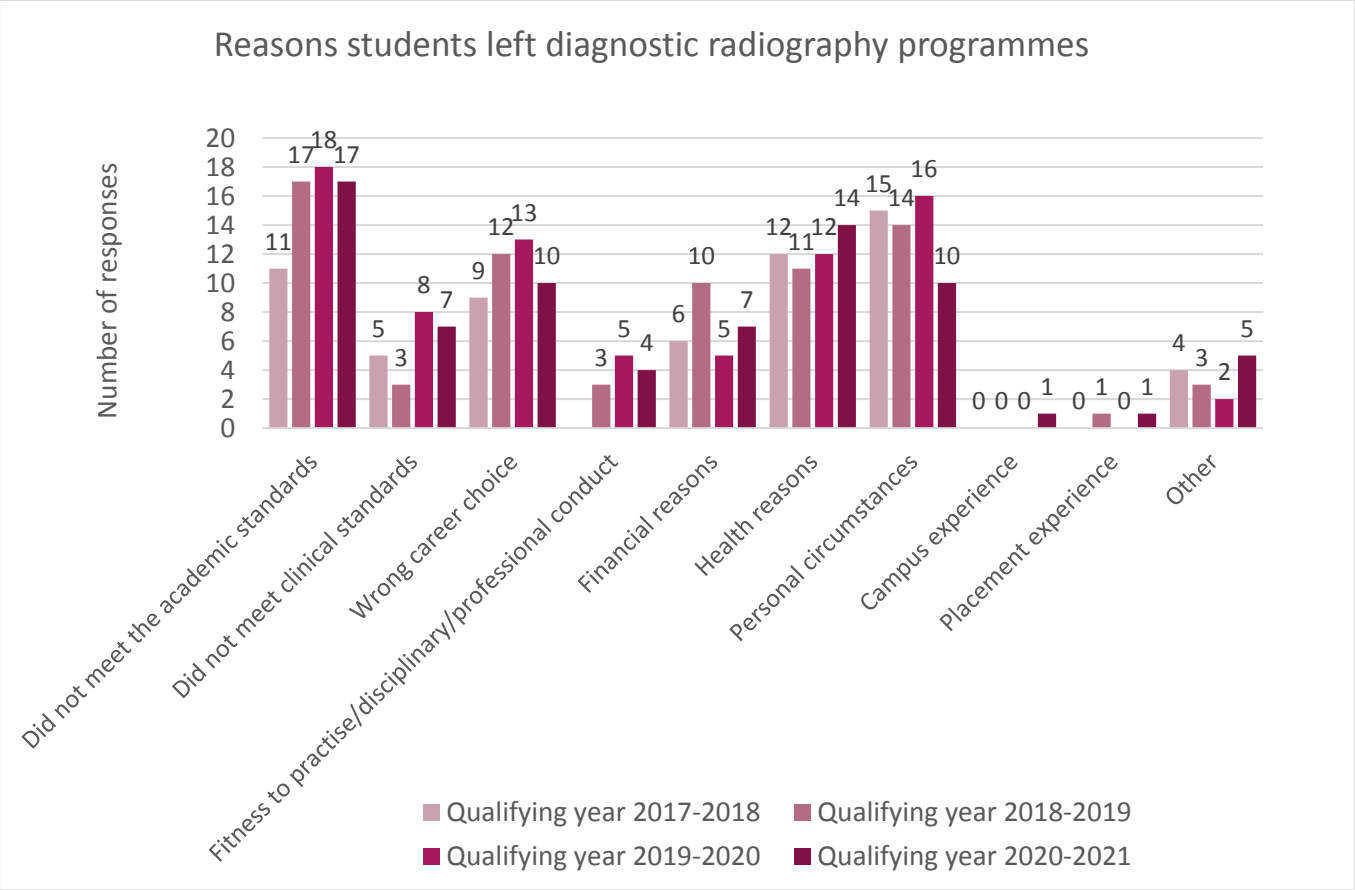

Figure 2 Chart showing the number of and reasons for students not completing diagnostic radiography programmes in the UK during the academic years 2017–21.

6.8.4.2 Reasons students left therapeutic radiography programmes

As in previous years, therapeutic radiography data (Figure 3) show some differences and some similarities to the diagnostic radiography data. Personal circumstances was the most commonly reported reason for a student leaving a programme (21.1%); this was closely followed by not meeting

the required academic standards and wrong career choice (both 18.4%). Compared with last year, fewer students left their therapeutic radiography programme due to not meeting the required academic standards (23.1%). Worryingly one therapeutic radiography student left their course due to placement experience.

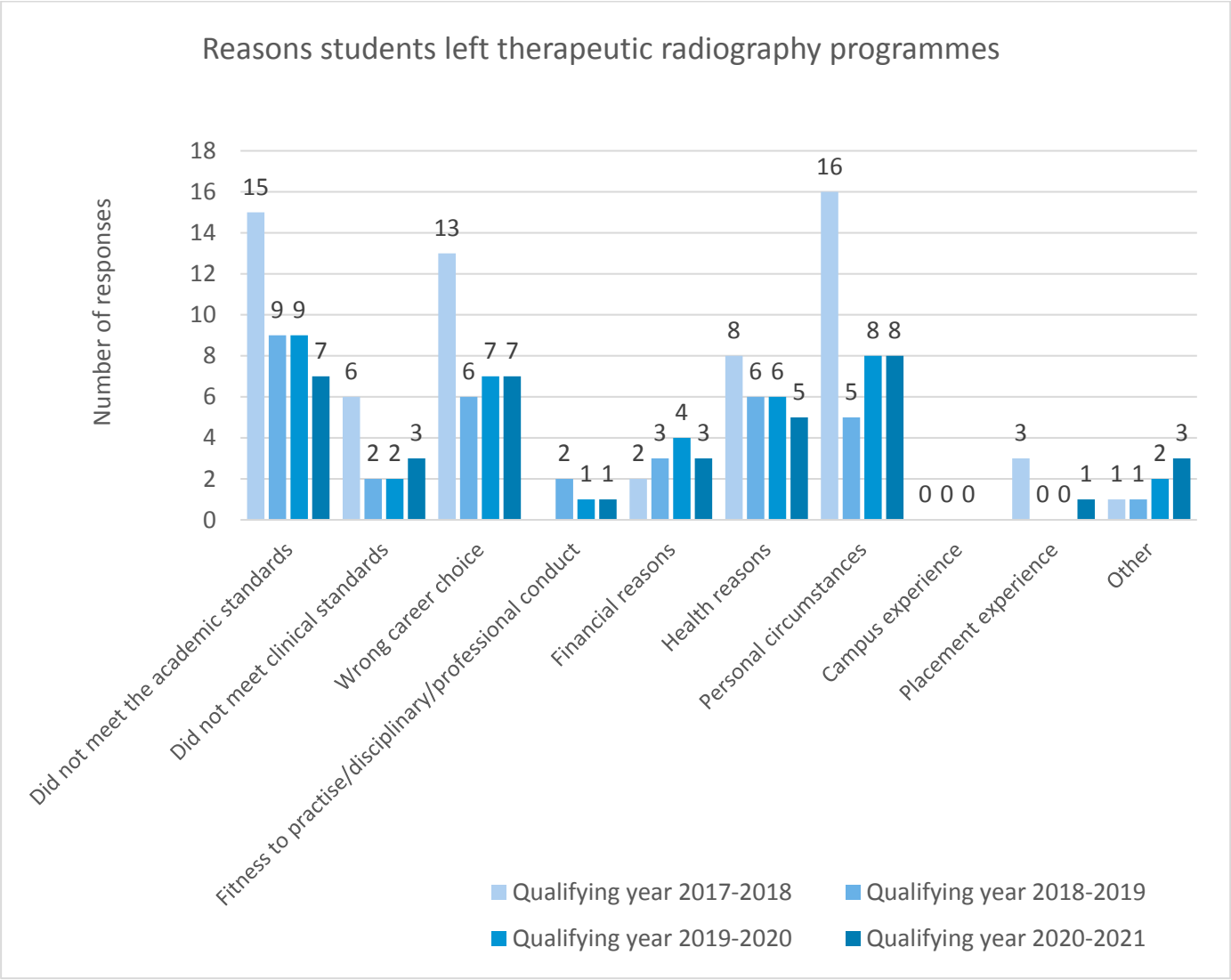

Figure 3 Chart showing the number of and reasons for students not completing therapeutic radiography programmes in the UK during the academic years 2017–21.

6.8.5 Successful strategies for reducing attrition

Respondents were asked to give their top three retention strategies for on both campus and placement.

6.8.5.1 Campus retention strategies

Ten themes emerged from the responses for campus retention strategies and these are similar to previous years. In the general comments it was noted that the "NHS LSF [Learning Support Fund] has been a welcome additional financial support for students". One education provider noted that "retention has been affected significantly by the pandemic" and "Individual circumstances that cannot be controlled impacted a student's ability to complete the course".

Common themes are shown in Table 24 and the frequency of the themes for 2020–21 is shown in

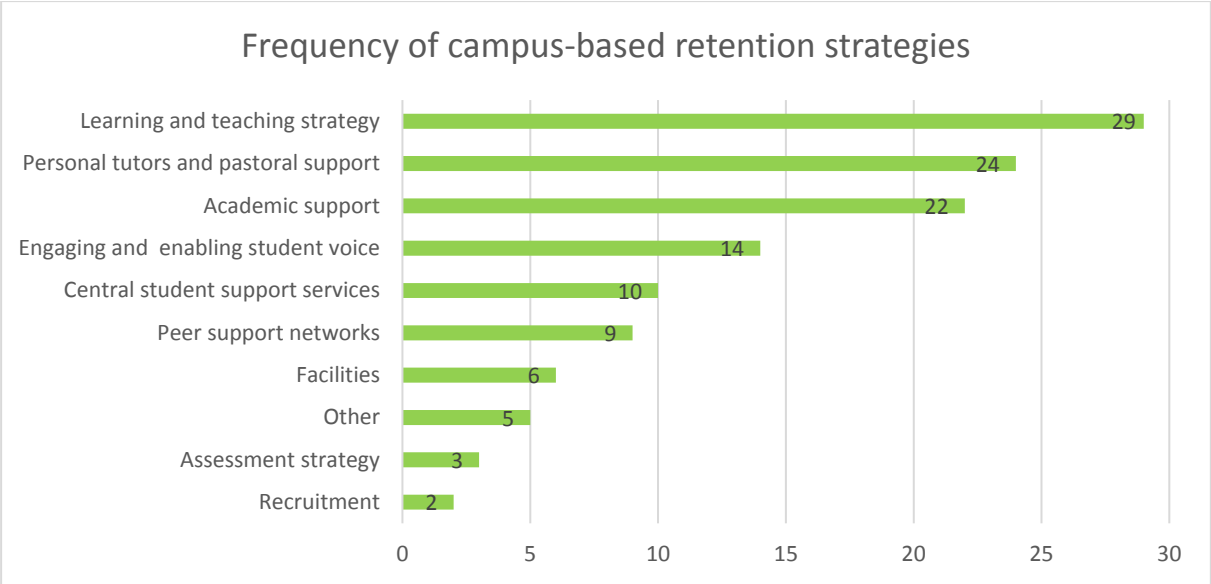

Figure 4.

1) Personal tutors and pastoral support • Robust personal tutor support and monitoring • Regular personal tutor meetings • Support and prompt intervention by personal tutor • Proactive support (rather than reactive) • Knowing each individual student and providing support to them in a variety of ways whether this is academically or pastoral • A very supportive environment with lots of support mechanisms in place • Strong personal tutor support and open door policy to enable regular contact with the students. This had to be done differently over covid times but the academic team have been innovative in how to retain student contact over this time.	**2) Academic support** • Early identification and support for those at risk • Personal academic coach model being developed to better support students • Community of learners between staff and students • Opting for student support meetings as opposed to utilising straightforward disciplinary measures to ascertain issues that may be easily resolvable • Academic adviser allocated at the beginning of year one – fixed • Increased support for students retrieving exams at second attempt • Open door policy for tutorial support • Well organised programme delivery and proactive development work using student feedback as a guide
3) Assessment strategy • There is a focus on supporting students with assessment and opportunities for 'mock' exams/presentation • Good exam briefings • Use of varied assessments	**4) Engaging and enabling the student voice** • Regular staff-student consultative meetings and close working liaison with student rep • Clear and regular communication in a variety of different formats • Town Hall for students every 6 weeks to discuss general programme issues • Student Society providing student with a 'voice' and promoting professional identity
5) Learning and teaching strategy	**6) Other** • Accurate information

• A comprehensive induction period and module introductions to clearly identify resources available to the students and the expectation of them • Carefully developed curriculum in which theory underpins practice in every module • Vibrant teaching and learning strategy • Interactive teaching / flipped classes • Engaging synchronous learning and continued practical classes during Covid • Creative practical workshops maintained during covid • Small tutorial groups help students to ask questions they might not normally ask therefore increasing their understanding • Small class sizes, each student is 'known' by staff • Well-structured virtual learning environment and accessible online resources • Guest lecturers to inspire and motivate students around career pathways • Careful planning of attendance pattern to prevent burnout	• Good communication and relationships between academic staff/ students and clinical • Creating a sense of belonging
7) Central student support services • Effective student support mechanisms through studies advice and university services • Health and wellbeing support • Signposting of and promotion of university student support services • Provision of welfare caseworker	**8) Facilities** • Social activities to promote a learning community • Excellent library provision and support, both online and face-to-face • Dedicated spaces to allow for student interaction both face-to-face and online
9) Peer support networks • Peer-assisted learning, to build relationships and informal buddy support across all three years • Peer support/buddy system • Community of practice. Developing strong peer support groups and accessibility to academic staff • Cohort 'Cwtch' sessions weekly to discuss work and wellbeing	**10) Recruitment** • Ensuring students make an informed choice – open nights and information prior to starting • Interview applicants – this has been invaluable in ensuring suitable candidates are offered

Table 24 Themes related to successful campus-based retention strategies.

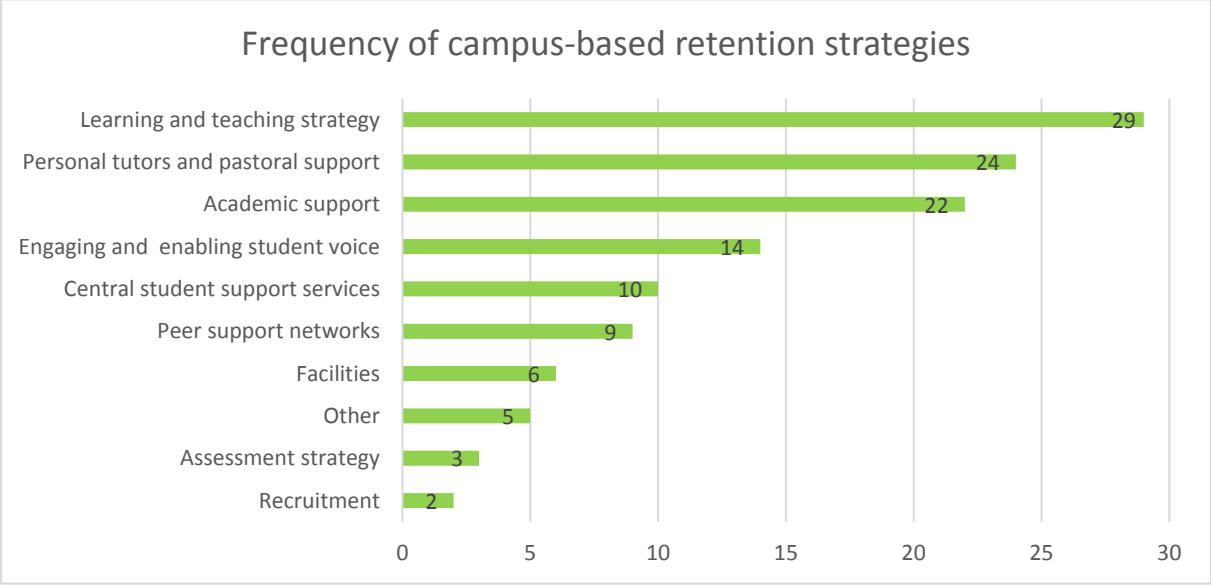

Figure 4 Campus-based retention strategy themes and frequency of occurrence throughout the UK during the 2020–21 academic year.

6.8.5.2 Placement retention strategies

Placement retention strategies have some similarities to previous years in that the provision of practice educators is the most common intervention. A diverse range of titles are used for practice-based learning facilitators/staff including:

- Clinical tutor
- Named link radiographers
- Clinical lecturer
- Clinical supervisor
- Clinical mentor
- Clinical educator

It is outwith the remit of this report to discuss these roles in depth; however, the accepted title for the person responsible for ensuring that students meet their learning outcomes and that assessments are carried out in clear, fair and transparent ways is 'practice educator'. The practice educator should also have a significant role in liaising with the university and the placement radiographers who are supervising the students. They will be a link between the placement manager and the students. They will spend a large part of their time undertaking pastoral and academic support for students. One provider commented that "in Scotland the term practice educator has a different meaning. We have student liaisons in clinical departments who provide a link between clinical and academic. It is a voluntary role taken on over and above clinical duties".

Common themes for placement retention strategies are shown in Table 25 and the frequency of the themes for 2020–21 is shown in

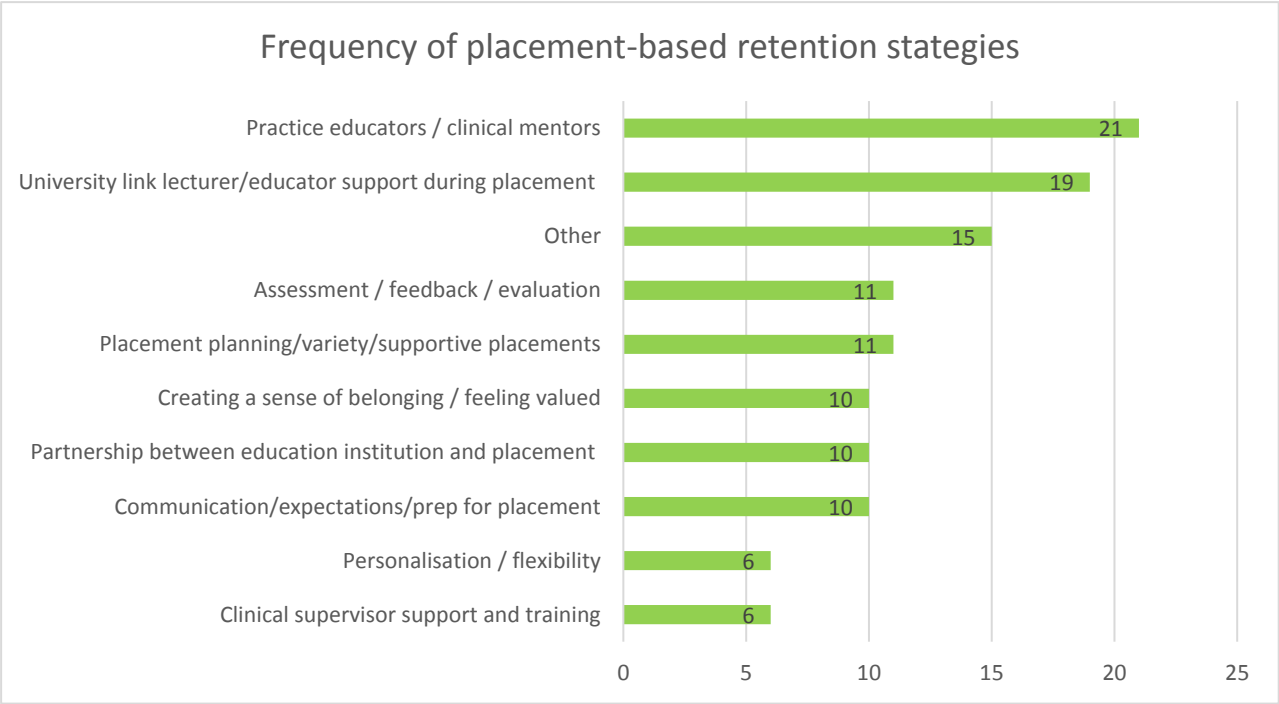

Figure 5.

The retention strategies have assisted some education providers in reducing attrition; however, providers have highlighted that attrition rates fluctuate and depend on many factors. Providing a sense of community and belonging are important, along with student support and the early identification of challenges.

During the Covid-19 pandemic, one provider highlighted that "clinical teams have increased the level of support offered for students on placement, when personal tutors have not been permitted to visit". It was reported that attrition rates have also been impacted by the pandemic, as "student recruitment used to involve a mandatory work experience placement, which we can no longer access, this has led to increasing attrition rates".

1) Practice educators /clinical mentors • Identified PE at each placement site responsible for managing the student's experience • Regular PE meetings to ensure all staff informed and parity across placement sites • Practice educator model being used at all placement partners	**2) University link lecturer/educator support during placement** • Dedicated academic link staff for each clinical placement site • Regular personal tutor visits and meetings with practice educators • Peer support and drop in Microsoft Teams meetings with link lecturers when on placement. This was implemented during first lockdown and has continued to be useful. • Academic advisor to provide pastoral care
3) Placement planning/variety/supportive placements	**4) Communication/expectations/preparation for placement**

• Rotation through varied clinical placement sites • Supportive placement environment and pastoral care from clinical staff • Careful planning of attendance pattern to prevent burnout • No student is placed at a site on their own	• Regular communication and updates to clinical staff; support them to raise concerns and ensure clinical teams are supported • Managing the students expectations • Prep for placement sessions prior to each placement period with input from more senior peers regarding experience
5) Assessment/feedback/evaluation • Progressive assessment approach with ample opportunity for formative feedback (weekly) • Clear assessment guidelines for practice educators • Continuous feedback/assessment strategy • Early identification of areas for development/constructive feedback and support • On placement focus groups with students and practice educators to address any placement issues early on and enable changes to be made if required	**6) Partnership between education institution and placement** • Close partnerships with all placement sites • Network of student liaison radiographers and mentors, with support from personal tutors • An effective relationship between placement and university with open communication to raise concerns easily and ensure students are being supported
7) Creating a sense of belonging/feeling valued • Long placements allow students to integrate into departments and feel a sense of belonging • Asking radiographers to modify their approach to be kinder to students • Blocks of placement allow for students and staff to develop a routine with each other • Mental well-being support • Peer support opportunities by mixing year groups at placement centres	**8) Clinical supervisor support and training** • Strong mentorship with regular training and updates facilitated by academic staff linking into to clinical work • Annual mentor provision and training provided for all mentors and supervising radiographers • Practice educator courses • Clinical supervisor training addressing failing to fail
9) Personalisation/flexibility • Local placement providers • Flexible working • Flexible approach to placement provision • Student-centred approach to all aspects of the programme	**10) Other** • Regular live webinars to retain a sense of community • The use of a clinical mentorship programme • Placement accommodation/travel reimbursement • Simulation sessions

Table 25 Themes related to successful placement-based retention strategies.

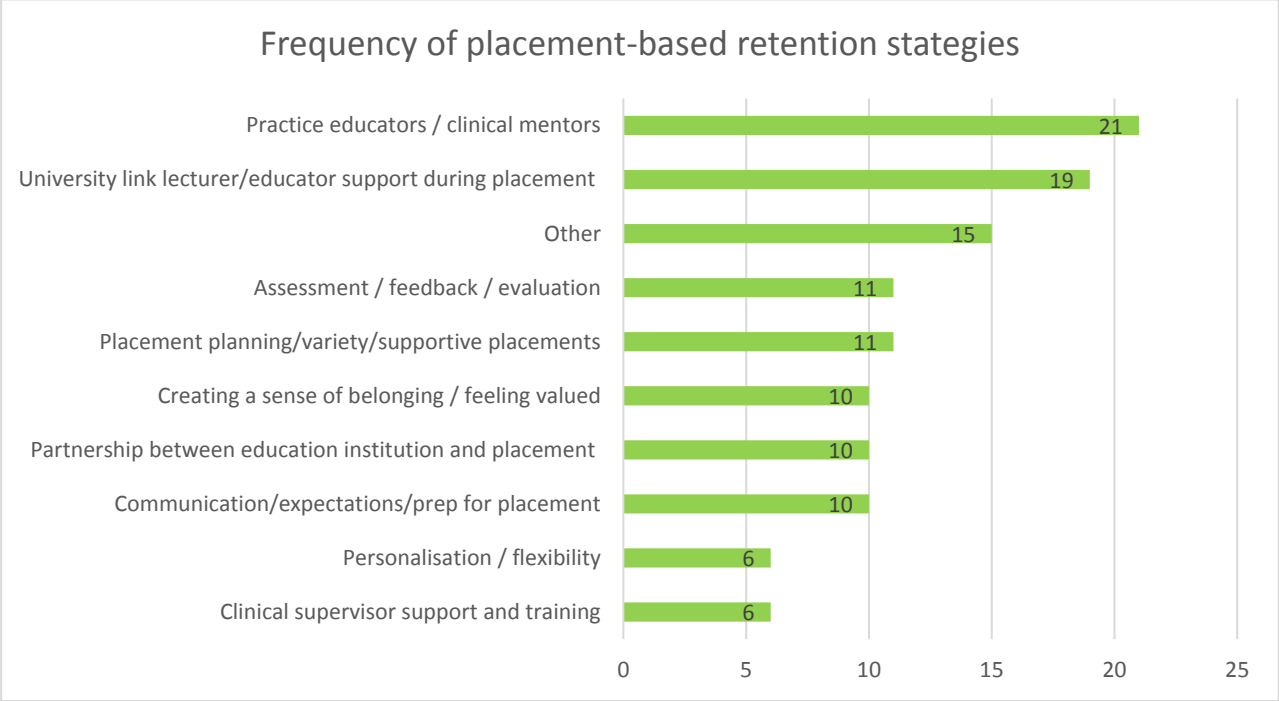

Figure 5 Placement-based retention strategy themes and frequency of occurrence throughout the UK during the 2020–21 academic year.

Education institutions were varied in their reports of attrition; some reported low attrition, whereas others had stable or high attrition. One provider reported that attrition had increased as student intake increased. A number of providers highlighted the challenges due to the Covid-19 pandemic and the difficulties judging whether retention strategies had an impact as the year was "not usual".

Finances were also reported to impact on attrition, for example one education provider commented "through student learning contracts, students can enquire with respect to flexible working whilst on placement. This is useful for students who have dependents or need to work to fund their studies. Despite the introduction of the LSF, we are still seeing students with financial struggles who are not eligible for hardship support. We have seen a significant number of students leave because of this and this should be something that the professional body should take forward with the NHS (HEE)".

It is important to note that where the College of Radiographers 2020/21 pre-registration programme survey addresses attrition it does not explore the number of students who might otherwise have left their course without the hard work of clinical and academic staff to support them (identified retention).

Simulation was reported to be valuable in supporting students, taking pressure off clinical departments and better preparing students for clinical placement.

6.9 Completion from pre-registration programmes

According to data submitted by the education providers, at the point of submission 1,093 diagnostic radiography students and 238 therapeutic radiography students were eligible to apply for registration with the HCPC. This has increased from the previous year by four students for diagnostic radiography and six students for therapeutic radiography (Table 26). Several diagnostic and therapeutic education providers did not submit data this year so the number entering the workforce is likely to be higher.

Charts showing the distribution of degree classifications for diagnostic and therapeutic radiography BSc (Hons) degrees in the UK, for completion year 2020–21, are represented in Figure 6 and Figure 8. The distribution of degree classifications for diagnostic and therapeutic radiography PgD/MSc degrees in the UK, for completion year 2020–21, are represented in Figure 7 and Figure 9.

	Completion of a qualification	Awards leading to eligibility to register 2020–21	Awards leading to eligibility to register 2019–20	Not eligible to apply for registration
Diagnostic radiography students	1,096*	1093*	1,089*	3
Therapeutic radiography students	238*	238*	232*	0

*Table 26 Number of completions and awards in diagnostic and therapeutic radiography programmes in the UK at the time of data submission. * figures are likely to be higher due to anomalous or partial data submitted by a number of education institutions.*

6.9.1 Diagnostic radiography degree classification

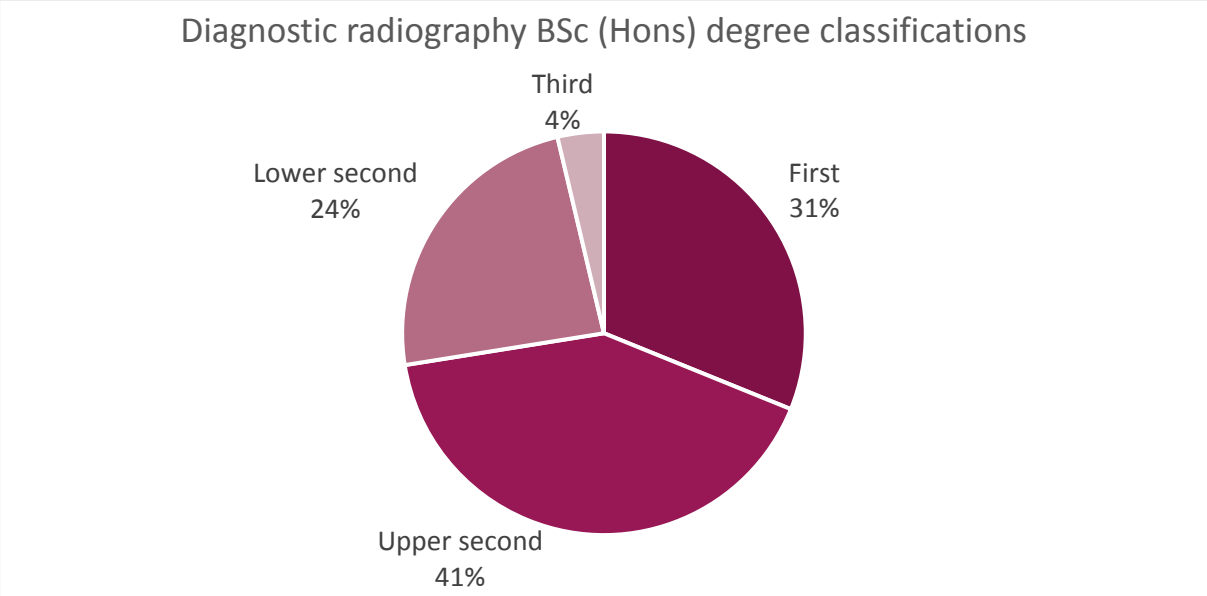

Figure 6 Chart showing distribution of degree classifications for diagnostic radiography BSc (Hons) degrees in the UK for completion year 2020–21.

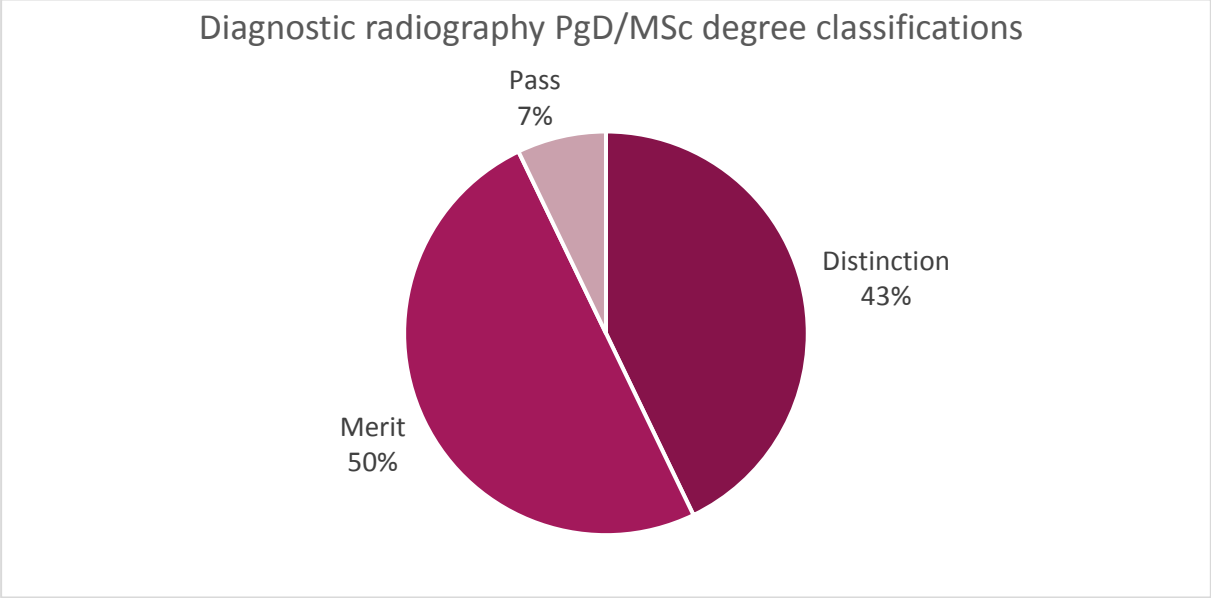

Figure 7 Chart showing distribution of degree classifications for diagnostic radiography PgD/MSc degrees in the UK for completion year 2020–21.

6.9.2 Therapeutic radiography degree classification

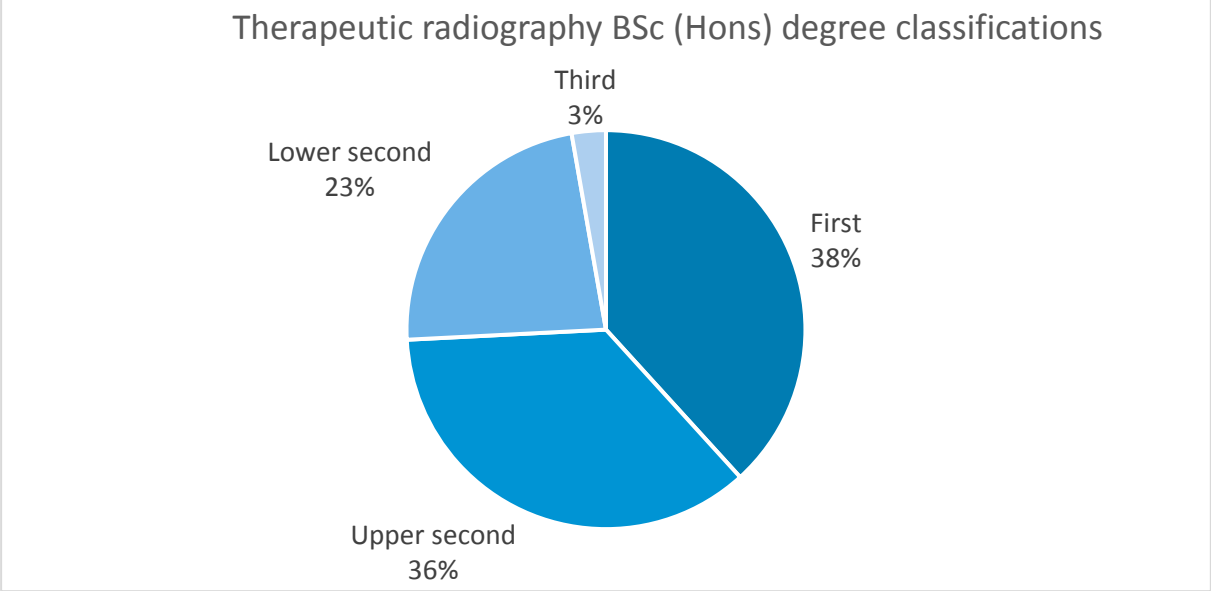

Figure 8 Chart showing distribution of degree classifications for therapeutic radiography BSc (Hons) degrees in the UK for completion year 2020–21.

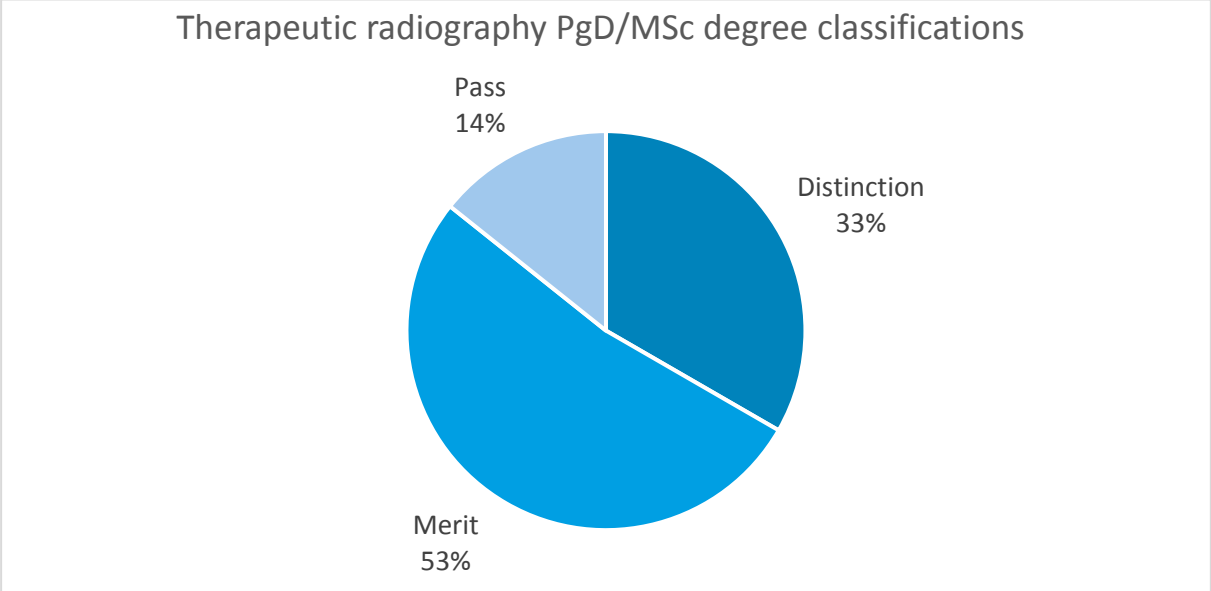

Figure 9 Chart showing distribution of degree classifications for therapeutic radiography PgD/MSc degrees in the UK for completion year 2020–21.

6.9.3 Comparison of degree classifications with previous years

Undergraduate degree classifications are presented in Figure 10 and Figure 11. The data are consistent with previous years for diagnostic radiography with only slight fluctuations between years. Therapeutic radiography data show a decrease in 2:1 classifications and a slight increase in 1st and 2:2 classifications, compared to last year.

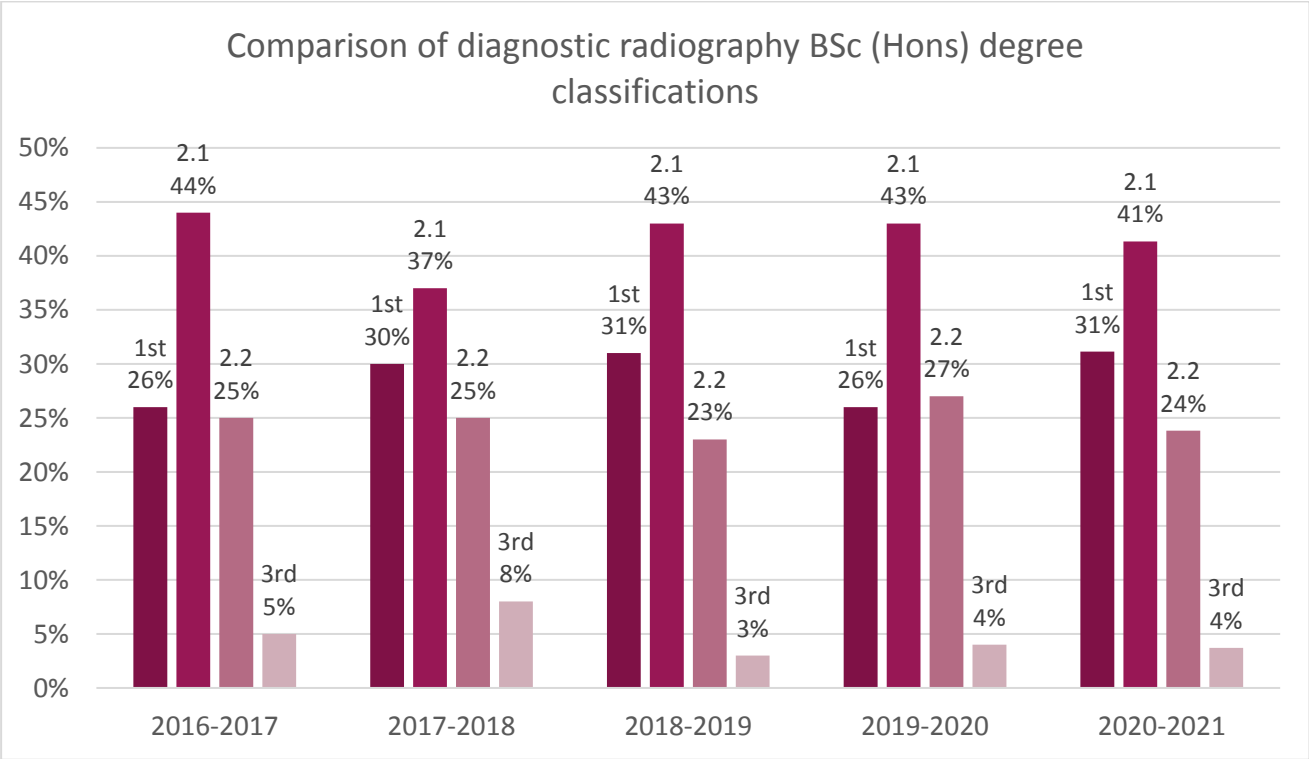

Figure 10 Chart showing degree classifications for BSc (Hons) diagnostic radiography programmes in the UK across the academic years 2016–21.

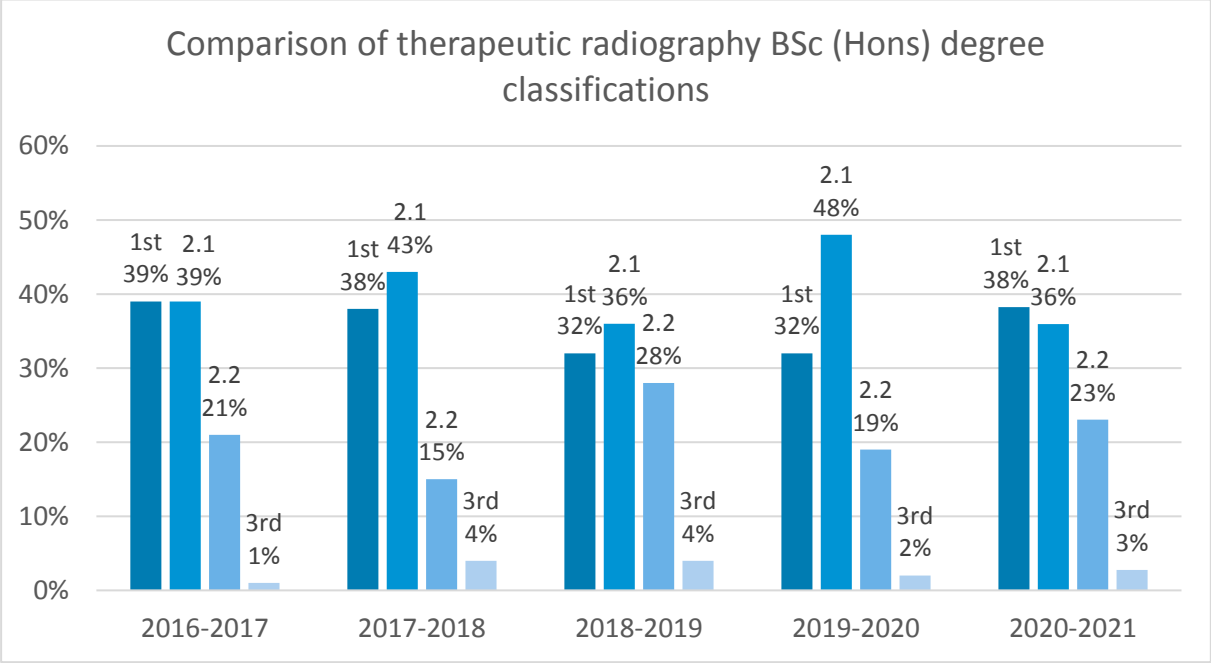

Figure 11 Chart showing degree classifications for BSc (Hons) therapeutic radiography programmes in the UK across the academic years 2016–21.

Postgraduate degree classifications are presented in Figure 12 and Figure 13. No data were submitted for the two institutions delivering diagnostic radiography PgD/MSc programmes in 2017–18. This year a much greater percentage of students achieved a distinction in diagnostic radiography (43%) than in therapeutic radiography (33%), and the number of distinctions for both disciplines is high.

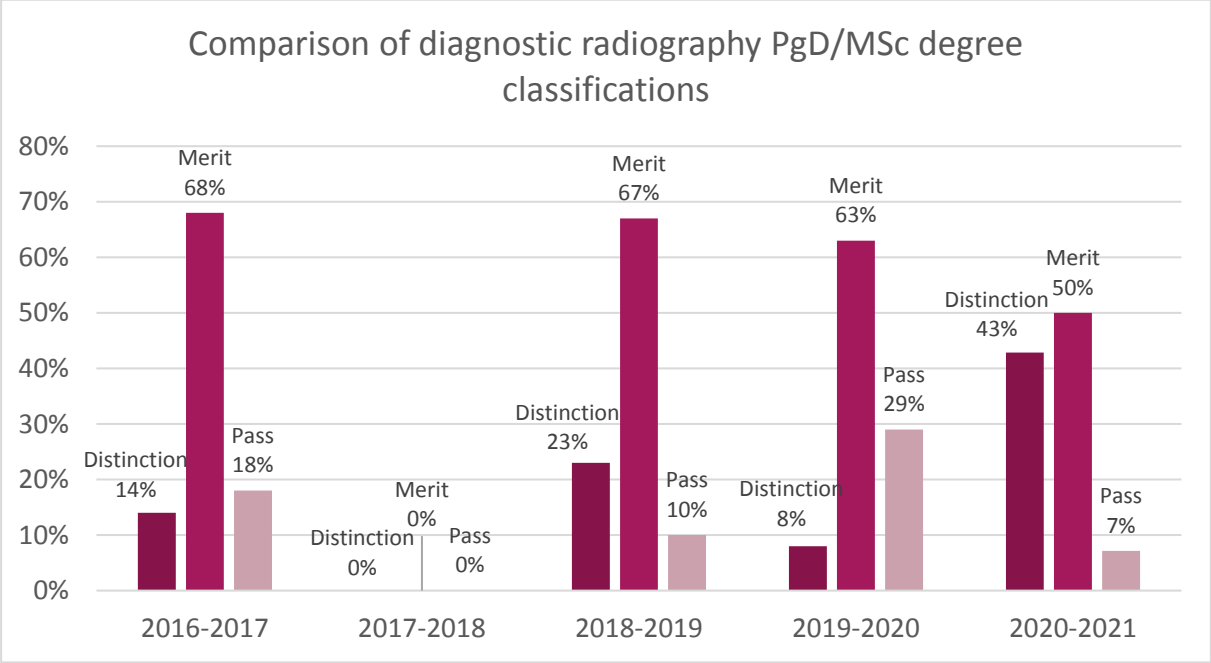

Figure 12 Chart showing postgraduate degree classifications for diagnostic radiography programmes in the UK across the academic years 2016–21

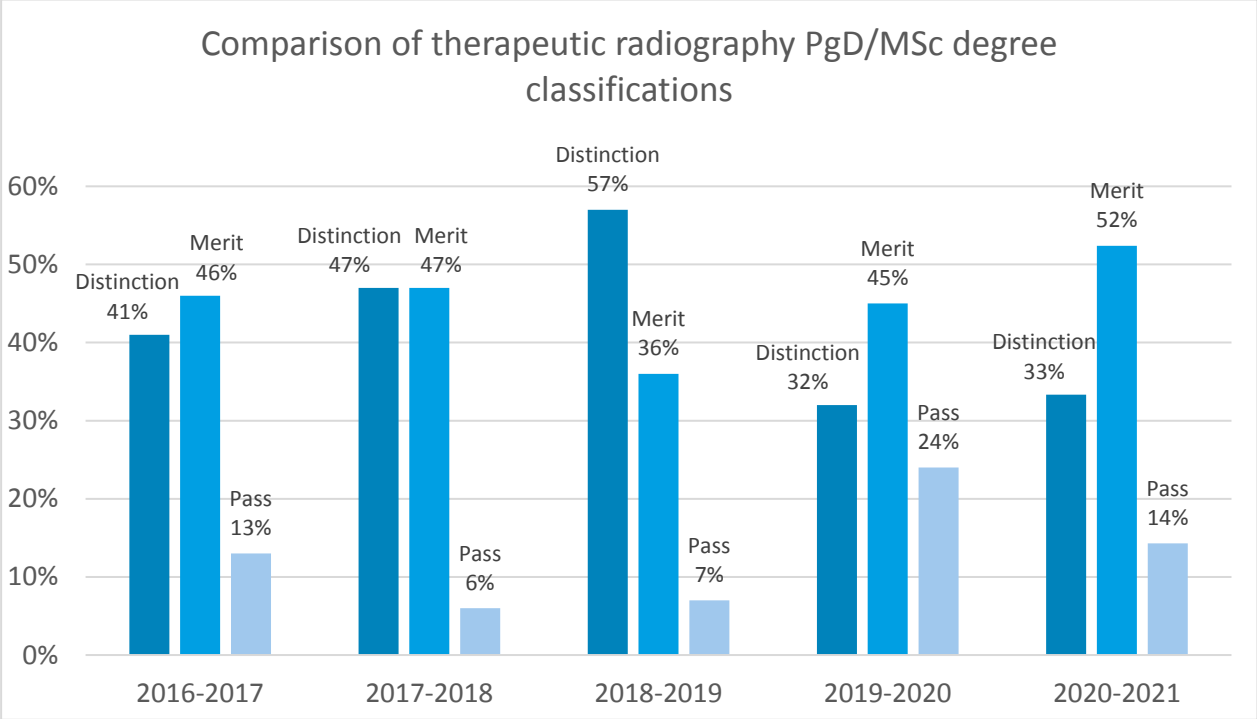

Figure 13 Chart showing postgraduate degree classifications for therapeutic radiography programmes in the UK across the academic years 2016–21.

6.9.4 Students still to complete

Despite the deadline for data submission being extended until early January 2022, there were still students who had not completed their degree at the point of submission. As noted previously, some education providers submitted data prior to the final progression board so the data may show more students still to complete than there actually were for the 2020–21 academic year.

A higher number of students were still to complete than in previous years. Provider feedback suggests this is likely due to the impact of the Covid-19 pandemic and disruption to academic and/or clinical education.

Programme	Number of students still to complete
Diagnostic radiography	60
Therapeutic radiography	30

Table 27 Table showing the number of students still to complete their course at the time of completing the College of Radiographers 2020/21 pre-registration programme survey. Data include undergraduate and postgraduate students.

6.10 Staff establishments

The staff establishment data provided will be used to inform commissioners, funders and allocators, and to raise awareness of radiography education and the need for suitable and sufficient educators both on campus and on placements.

The following data consider full time equivalent (FTE) numbers rather than individual numbers. The staff to student ratios have been calculated from the number of students who started the programme and do not consider attrition.

Staff to student ratios have been calculated and expressed in decimal format, i.e. 0.10 represents a staff to student ratio of 10:100 or $\frac{10}{100}$.

The CoR does not make recommendations regarding staff to student ratios, but during the approval process assessors will enquire about the sufficiency of the number of campus and practice educators.

6.10.1 Campus staff

Campus lecturing staff have responsibility for administration and delivery of pre-registration radiography programmes. One of the annual survey questions asked "How many full time equivalent (FTE) members of staff are primarily employed in delivering this course on campus?". The aim of this question was to clarify the data received from the education providers. It is recognised that staff from other disciplines will input into radiography programmes, but it is important that the core course team numbers are reported to identify areas where there may be links; for example, a link between the staff to student ratio and attrition and retention.

The anonymised and randomised list of staff to student ratios can be found in Appendix H and education providers may find it useful to compare their ratio with similar-sized institutions.

6.10.1.1 Diagnostic radiography staff to student ratios

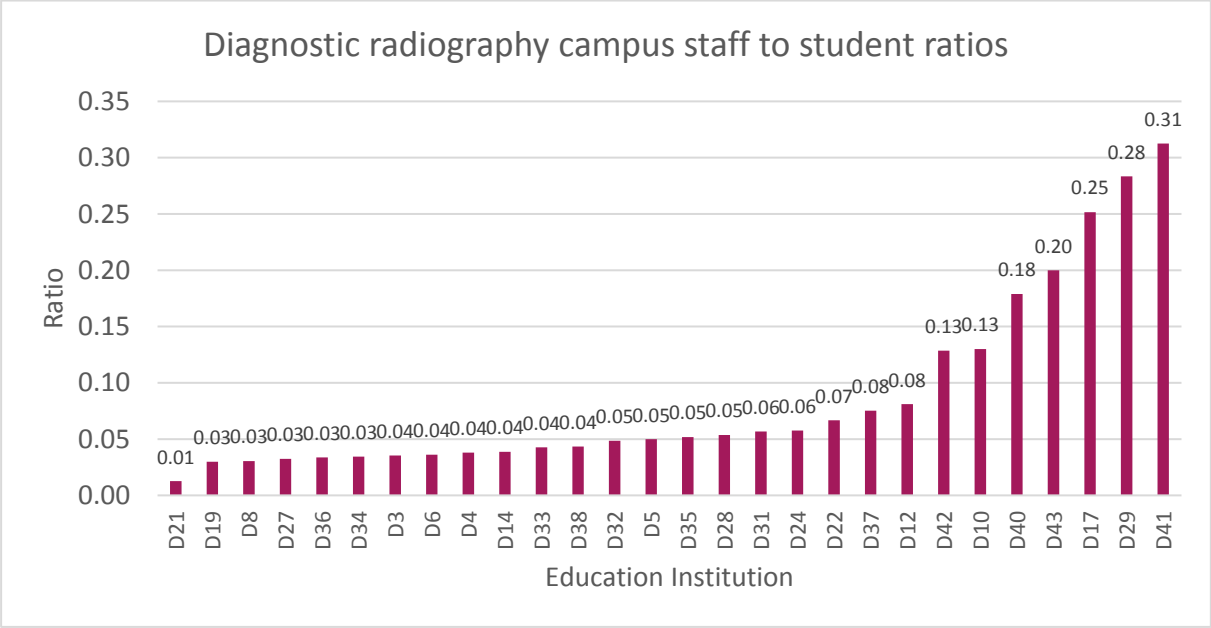

Figure 14 Chart showing the campus staff to student ratios for pre-registration diagnostic radiography programmes in the UK for the 2020–21 academic year.

The data submitted for diagnostic radiography staff to student ratios appear to be realistic in value. However, a number of education providers (n=10) did not submit data for this part of the survey and this reduces the conclusions that can be drawn from Figure 14. Diagnostic radiography staff to student ratios vary from 0.01 (1 member of staff for every 100 students) to 0.31 (31 members of staff for every 100 students).

It is difficult to calculate accurate staff to student ratios, particularly when staff teach across multiple programmes. Within these limitations, the data in Figure 14 show that more providers have higher student to staff ratios than those reported for 2019–20. There are seven providers with staff to student ratios of 1.0 or more, compared with three providers reporting this ratio in 2019–20.

The mode value of staff to student ratio continues to be 0.05.

The data show no clear link to suggest that staff to student ratios have any impact on attrition rates, but the data is difficult to interpret, as highlighted above.

6.10.1.2 Therapeutic radiography staff to student ratios

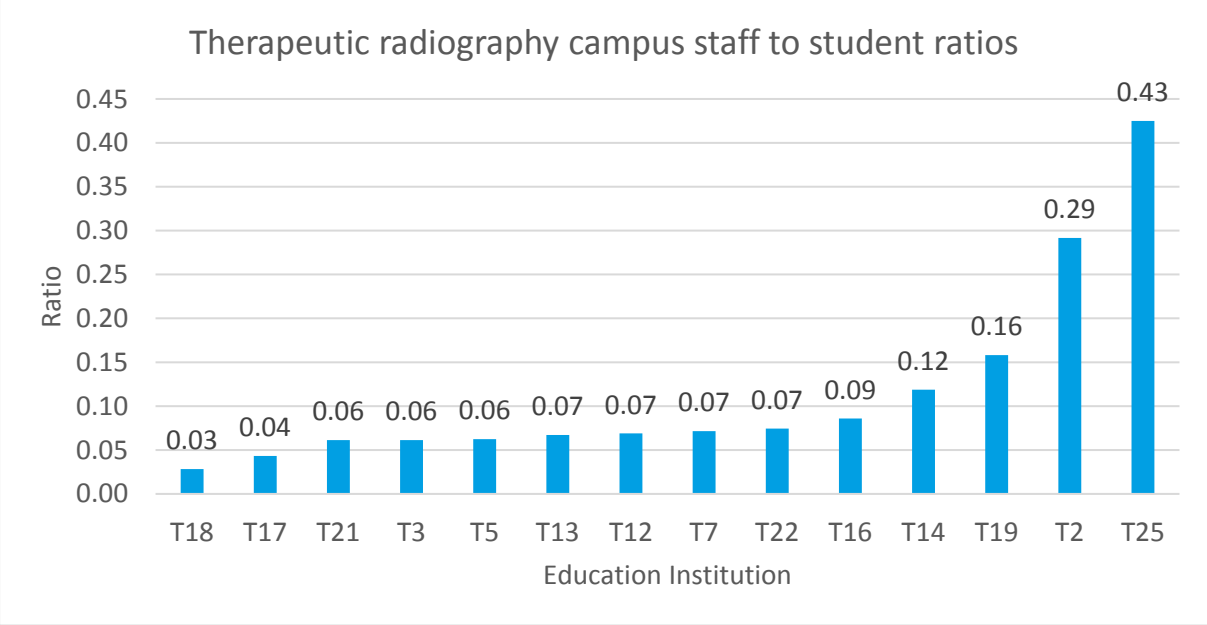

Figure 15 Chart showing the campus staff to student ratios for pre-registration therapeutic radiography programmes in the UK for the 2020–21 academic year.

A number of education providers (n=8) did not submit data for this part of the survey and this reduces the conclusions that can be drawn from Figure 15.

Therapeutic radiography staff to student ratios vary from 0.03 (3 members of staff to every 100 students) to 0.43 (43 members of staff to every 100 students). The two programmes with the highest ratios are Master's level programmes at education institutions that also provide BSc (Hons) programmes and so it is likely that lecturers are shared across these programmes. One of the programmes is in the first iteration, which might affect student numbers. The highest ratio for an undergraduate pre-registration programme is 0.31 (31 members of staff for every 100 students); this is an increase from 2019–20, when the highest ratio reported was 0.12.

The mode value of staff to student ratios is 0.05 (unchanged from 2019–20).

Due to incomplete data it is difficult to determine how figures compare with 2019–20. The CoR makes no recommendation as to the number of staff that should deliver each programme as methods of delivery vary between education providers. However, the CoR, through the AAB, will continue to communicate with and monitor those education providers highlighted in this report as having high attrition rates.

6.10.2 Practice educators

A clear definition of a practice educator was given in the College of Radiographers 2020/21 pre-registration programme survey:

> A practice educator is usually a registered professional who supports learners in the workplace. They facilitate practice education alongside clinical and academic colleagues. In addition, the practice educator is likely to hold responsibility for signing off competency and assessment criteria, based upon the standards produced by the education provider and relevant professional body; although it is recognised that local models of delivery and assessment will apply.
>
> Generally, it is the practice educator who holds responsibility for ensuring that the contributing elements of practice education cover all relevant learning outcomes. (Health and Care Professions Education Leads Group, 2016)

The CoR acknowledges that many different titles are used for this role (Section 6.8.5.2), though 'practice educator' is the most common term and is used throughout CoR documentation.

The pre-registration programme survey did not ask who funded practice educator posts or if the practice educators were accredited by the CoR.

6.10.2.1 Diagnostic radiography practice educator to student ratios

The data for diagnostic radiography practice educator to student ratios are difficult to interpret due to one education provider in Scotland indicating that they have 120 practice educators that meet the definitions for this role, as stipulated by the CoR and the Health and Care Professions Education Leads group. Another education provider in Scotland highlighted that "in Scotland the term practice educator has a different meaning". However, as the figures reported by this education provider significantly conflict with the number of accredited practice educators recorded by the CoR, their assertions should be taken with a degree of caution. Consequently, data from this education provider has been removed from Figure 16. A number of providers indicated that all radiographers supervising students are considered practice educators, which will also lead to inaccurate data, hence Figure 16 should be viewed with caution.

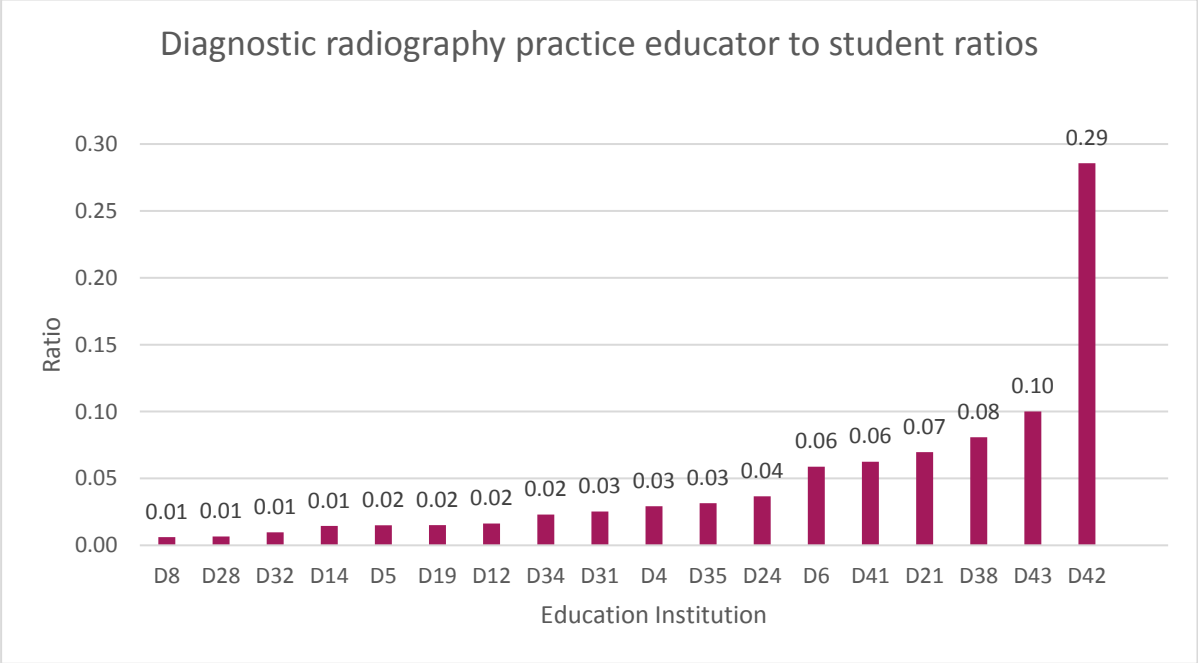

Figure 16 Chart showing the practice educator to student ratios for pre-registration diagnostic radiography programmes in the UK for the 2020–21 academic year.

The mode value for practice educator to student ratio is 0.02, which is an improvement from previous years where the figure was 0.00 to 0.01. Six education providers did not submit data. Nine education providers have a practice educator to student ratio of 0.00, which leaves no practice educators supporting students while they are on placement. These providers have been removed from Figure 16 for clarity. The practice educator to student ratios range from 0.00 (no practice educators supporting students) to 0.29 (29 practice educators for every 100 students). This has increased from last year (0.00–0.07), although the majority of providers reported a ratio of 0.05 (5 practice educators for every 100 students) or less. Given the pressures in clinical practice, this is a low number of practice educators supporting diagnostic radiography students whilst on placement and needs to increase to support a rise in student numbers.

The CoR, through the AAB, will continue to communicate with and monitor those education providers reporting low numbers of practice educators supporting diagnostic radiography students.

6.10.2.2 Therapeutic radiography practice educator to student ratios

As with diagnostic radiography, the chart for therapeutic radiography practice educator to student ratios is difficult to interpret (Figure 17). One education provider reported a student to practice educator ratio of 1.49 (149 practice educators to every 100 students). Data submitted by this education provider has been removed as it is unlikely to meet the CoR and the Health and Care Professions Education Leads group definition of a practice educator and does not correlate with the number of accredited practice educators recorded by the CoR. Some education providers indicated that all radiographers supervising students are considered practice educators, which will lead to inaccurate data, hence Figure 17 should be viewed with caution.

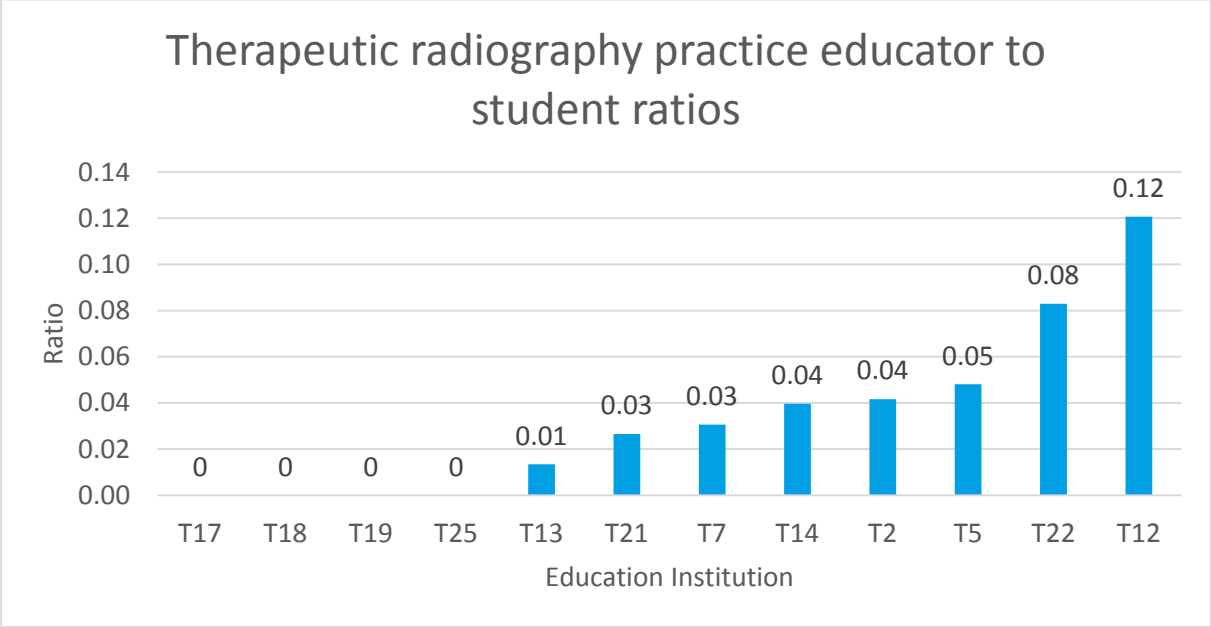

Figure 17 Chart showing the practice educator to student ratios for pre-registration therapeutic radiography programmes in the UK for the 2020–21 academic year.

Four education providers reported that they have no practice educators supporting their students, making the mode ratio value 0.03 this year; this is a slight increase from 0.02 in 2019–20. The practice educator to student ratios for therapeutic radiography range from 0.00 (0 practice educators for every 100 students) to 0.12 (12 practice educators for every 100 students).

7 Post-registration programmes

7.1 Approvals/re-approvals of post-registration programmes

The AAB considered a variety of post-registration programmes this year. The figures in Table 28 relate to programmes which lead to qualification at FHEQ level 7 and above or Scottish Credit and Qualification Framework (SCQF) level 11 and above, i.e. Postgraduate Certificate/Diploma and MSc/MA.

Speciality	Number of approvals/re-approvals/extensions of approval
Breast imaging	1 extension of approval
Clinical imaging including CT and MRI	8 approvals/re-approvals 3 extensions of approval
Nuclear medicine/DEXA	0
Others including professional and interprofessional provision	0
Practice Educator Accreditation Scheme	1 approval
Radiotherapy	No provision was approved/re-approved during 2020–21

Table 28 Table showing the number of post-registration postgraduate programmes approved by the AAB in 2020–21.

8 Short courses

Short courses are designed to provide opportunities for individuals to update their knowledge and skills and may also assess or confirm competence. It is likely that a short course will have wide general appeal, but it cannot be tailored to the learning or developmental needs of an individual. Additionally, it is unlikely that a short course would attract academic credit and as such is unlikely to make a significant contribution to a postgraduate award.

8.1 Approvals/re-approvals of short courses

Speciality	Number of approvals/re-approvals/extensions of approval
Breast screening	0
Clinical imaging (including CT, Intra ocular foreign body reporting, skeletal reporting and suspected physical abuse)	0
Dental imaging	1 approval and 1 re-approval
Imaging/safeguarding of children	3 modules
IV administration	4 re-approvals
MRI	2 re-approvals
Nuclear medicine/DEXA	1 extension of approval
Practice education	1 approval
Others including interprofessional provision	2 online modules
Radiotherapy	0
Ultrasound (not eligible for Consortium for the Accreditation of Sonographic Education accreditation)	0

Table 29 Table showing the number of short courses approved by the AAB in 2020–21.

9 Accreditation schemes

The CoR runs five accreditation schemes:

- Assistant practitioner accreditation
- Continuing professional development accreditation (CPD Now accreditation)
- Practice educator accreditation
- Advanced practitioner accreditation
- Consultant practitioner accreditation

9.1 Assistant practitioner accreditation

Since 1 January 2014, all assistant practitioners who are members of the SCoR have been eligible to apply for accreditation through CPD Now. Assistant practitioners can apply for accreditation of their scope of practice based on having completed a CoR approved education and training course, or by submission of CPD evidence via CPD Now. Due to the volume of successful applications, the number of accredited assistant practitioners are presented to the AAB without names.

An update of the CPD Now and accreditation system is in progress, in conjunction with a major review of the Education and Career Framework. It is anticipated that these revised resources will be available in 2022. New accreditations were suspended and re-accreditations extended during this transition, which explains the low number of assistant practitioner accreditations presented, particularly in June 2021.

Approval and Accreditation Board	Number of assistant practitioners presented
November 2020	19
March 2021	10
June 2021	0
Total	**29**

Table 30 Number of assistant practitioners accredited and presented to the AAB during 2020–21.

9.2 Continuing professional development accreditation (CPD Now accreditation)

SCoR members gaining CPD accreditation are not presented to the AAB.

This accreditation is a completely automatic process whereby practitioners of all tiers can gain accreditation if they complete twelve pieces of CPD over the course of two years that meet at least six CPD Now framework outcomes. The CoR does not review members' CPD Now records, but reserves the right to audit the records of those who have gained this accreditation.

9.3 Practice educator accreditation scheme

Practice educator accreditations are presented to the AAB.

Approval and Accreditation Board	Number of practice educators presented
November 2020	8
March 2021	2
June 2021	2
Total	**12**

Table 31 Number of practice educators accredited and presented to the AAB during 2020–21.

9.4 Advanced practitioner accreditation

Advanced practitioner accreditations are presented to the AAB.

Approval and Accreditation Board	Number of advanced practitioners presented
November 2020	5
March 2021	3
June 2021	2
Total	**10**

Table 32 Number of advanced practitioners accredited and presented to the AAB during 2020-–21.

9.5 Consultant practitioner accreditation

Consultant practitioner accreditations are presented to the AAB.

Approval and Accreditation Board	Number of consultant practitioners presented
November 2020	4
March 2021	3
June 2021	0
Total	**7**

Table 33 Number of consultant practitioners accredited and presented to the AAB during 2020–21.

10 Continuing professional development event/resource endorsement

The AAB of the CoR oversees the CPD Now Endorsement scheme. An administrator for the professional and education team together with a professional officer run and direct the process, generally on a weekly basis.

The CoR standards for CPD are outcome based and are matched to a range of possible CPD Now professional outcomes. In order that an event, programme, or short course may be endorsed by the CoR, an application for CPD Now endorsement must demonstrate that the content meets SoR professional body standards for CPD and match at least two of the core CPD Now professional outcomes listed on the CoR CPD endorsement web page.

For the period 1 September 2020 to 31 August 2021 the CoR received 54 applications for endorsement of a range of resources. Applications included information about study days, user-group meetings, scheduled webinars, online on-demand tutorials, symposiums and conferences. A significant effect of the Covid-19 pandemic during this period was a move to online resources. Of the 54 submissions, 9 applications were deferred for a variety of reasons including: incomplete information on the application form, lack of strategy to support reflection and/or no evidence of support for learners in the form of signposting toward further study. Of those 9 deferred applications, 6 were resubmitted with revisions and approved during that same period (2020–21).

Endorsement of a resource remains valid for a period of two years unless there are any substantial changes. Substantial changes to a programme necessitate resubmission. During this period no resources underwent resubmission due to change of content.

The number of endorsement applications for 2020–21, in comparison with previous years, was low but did remain within the usual range of applications and deferrals. The lowest number of applications were received in 2007 (50 submissions) and the highest in 2011 (135 submissions), compared with 54 for this 2020–21 period. The low number of submissions is likely to be directly related to the Covid-19 pandemic, lockdown in the UK and unprecedented demands and pressures placed upon clinical imaging and radiotherapy services during this 2020–21 period.

Challenges for the endorsement team have included the late submission of applications, changes to names of resources and applicants requesting retrospective endorsement of events. These issues are dealt with on a case-by-case basis. Overall, most submissions were carefully worded, well designed and provided on a timely basis for CoR consideration.

11 Health and Care Professions Council

The relationship with the HCPC continued to be maintained and productive. The CoR and the HCPC worked with new diagnostic radiography education providers to ensure that pre-registration programmes were of high quality and that students could expect an excellent learning experience on both campus and placement.

12 Interprofessional engagement

In November 2017 the health professional bodies and trade unions began to update the publication *A joint position statement on continuing professional development for health and social care practitioners* (Joint Health and Social Care Professional Bodies and Unions, 2007). The aim of this work was to update the document to reflect the growing number of regulated professions within the UK and the demands on these health and social care professionals and associated support staff in the need to deliver high quality, safe patient care. The updated document *Principles for continuing professional development and lifelong learning in health and social care* was published in January 2019.

Due to the Covid-19 pandemic the 2020 interprofessional conference, usually held by the National Association of Educators in Practice (NAEP) with input from the SCoR, was cancelled. Abstracts are available on the NAEP website and the number of diagnostic and therapeutic radiographers submitting research abstracts continues to grow.

The Health and Care Professions Education Leads group comprises representatives from all the health and care professions professional bodies and the Council of Deans of Health. The group regularly responds jointly to consultations affecting health and social care education in the UK. Much of the discussion during the year 2020–21 was around radiography apprenticeships, advanced practice, the RePAIR Report and how to ensure continuity of education provision as the Covid-19 pandemic began to impact on healthcare settings and education institutions.

13 References

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Health and Care Professions Education Leads Group (2016). *Health and Care Professions (H&CP) Practice Education Guidance*, Birmingham: British Dietetic Association.

Health Education England. (n.d.). *DHSC Healthcare Education & Training Tariff* [Online]. Available: https://www.hee.nhs.uk/our-work/education-funding-reform/dhsc-healthcare-education-training-tariff [Accessed 13 May 2022].

Joint Health and Social Care Professional Bodies and Unions (2007). *A Joint Position Statement on Continuing Professional Development for Health and Social Care Practitioners*, London: Royal College of Nursing.

Society and College of Radiographers (2018). *Analysis of Student and Recently Qualified Radiographers Survey 2017*, [Report] London: Society and College of Radiographers.

Appendices

Appendix A UCAS tariff points – diagnostic radiography

Education Institution	UCAS tariff points
D27	220*
D31	128
D36	128
D41	128
D21	122
D12	120
D14	120
D19	120
D24	120
D28	120
D34	120
D35	120
D37	120
D38	120
D42	120
D5	120
D6	120
D8	120
D10	112
D17	112
D32	112
D4	112
D43	112
D33	108
D13	N/A
D22	N/A
D29	N/A
D3	N/A
D40	N/A

D = Diagnostic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year.

* Likely to be typographical error as 120 UCAS tariff points is stated on the university's programme web page

Appendix B UCAS tariff points – therapeutic radiography

Education Institution	UCAS tariff points
T12	120
T13	120
T14	120
T16	120
T3	120
T5	120
T7	120
T17	112
T21	112
T22	112
T18	108
T19	N/A
T2	N/A
T25	N/A

T = Therapeutic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year.

Appendix C Applications received – diagnostic radiography

Education Institution	Applications received
D19	708
D24	700
D32	612
D27	572
D41	560
D14	535
D12	502
D37	490
D6	422
D34	416
D21	345
D8	341
D33	323
D28	319
D40	289
D36	285
D3	245
D4	192
D35	180
D5	179
D43	163
D38	140
D29	83
D42	40
D10	31
D17	31
D22	Did not recruit
D31	Did not recruit

D = Diagnostic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year. Where there is no data for a specific programme these have been excluded from the table.

Appendix D Applications received – therapeutic radiography

Education Institution	Applications received
T5	224
T16	219
T13	202
T22	202
T18	188
T17	177
T3	173
T14	154
T12	121
T25	99
T7	89
T21	58
T2	25
T19	Did not recruit

T = Therapeutic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year. Where there is no data for a specific programme these have been excluded from the table.

Appendix E Student intake – diagnostic radiography

Education Institution	Students started 2020–21
D19	186
D14	129
D28	97
D34	97
D27	92
D6	88
D4	79
D38	77
D24	72
D37	70
D33	64
D35	64
D8	61
D12	60
D32	59
D36	58
D21	48
D3	44
D40	38
D5	37
D10	31
D17	31
D43	30
D41	16
D13	14
D42	14
D29	10
D22	Did not recruit

D = Diagnostic radiography programme

Diagnostic and therapeutic radiography at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year.

Appendix F Student intake – therapeutic radiography

Education Institution	Students started 2020–21
T13	80
T22	44
T14	42
T17	41
T5	40
T3	36
T12	28
T18	24
T16	22
T7	18
T2	17
T25	16
T21	14
T19	Did not recruit

T = Therapeutic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year.

Appendix G Randomised and anonymised attrition data

Data are based on responses to the College of Radiographers 2020/21 pre-registration programme survey. Negative attrition indicates programmes that have reported more students completing than originally started, e.g. students joining the programme in the continuing years.

Education Institution	2020–21 attrition	Position change from last year
D32	1	
D22	2	↑13
D29	2	↑17
T19	2	↑26
D35	5	↑1
T22	6	
D3	7	↓-3
D33	8	↑16
D38	9	↓-6
D21	10	
T7	11	↓-10
D5	12	↑6
D36	13	↓-1
D12	14	↓-3
D37	15	↑8
D4	16	↓-2
D14	17	↓-7
D27	17	↑17
D24	19	↓-14
T18	20	↓-11
T2	21	↓-20
T3	21	↓-1
D8	23	↓-10
D28	24	↑8
D34	25	↓-3
D6	26	↓-19
D19	27	↑4
T14	28	↓-7
T16	29	↓-3
D31	29	↓-3
T21	29	↑6
T17	29	↑8
T5	33	↑3
T13	34	↓-1
T12	35	↑3

D = Diagnostic radiography programme

T = Therapeutic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

EI numbers are the same as last year.

No data were submitted by T23, D16, D9, T6, D13, D15, D25, T11, T9, D20, D30, T1 and T15.

Appendix H Randomised and anonymised campus staff to student ratios

Data are based on responses to the College of Radiographers 2020/21 pre-registration programme survey. Education institutions have been allocated the same codes as in other appendices. Data are presented for BSc (Hons) and MDRad and MTRad programmes only due to the overlap of staff between these and other programmes.

Education Institution	Campus staff to student ratio
T25	0.43
D41	0.31
D17	0.25
D43	0.2
D40	0.18
T19	0.16
D10	0.13
D42	0.13
T14	0.12
T16	0.09
D12	0.08
D37	0.08
D22	0.07
T12	0.07
T13	0.07
T22	0.07
T7	0.07
D24	0.06
D31	0.06
T21	0.06
T3	0.06
T5	0.06
D28	0.05

Education Institution	Campus staff to student ratio
D32	0.05
D35	0.05
D5	0.05
D14	0.04
D3	0.04
D33	0.04
D38	0.04
D4	0.04
D6	0.04
T17	0.04
D19	0.03
D27	0.03
D34	0.03
D36	0.03
D8	0.03
T18	0.03
D21	0.01
D15	No data
D16	No data
D20	No data
D25	No data
T6	No data

D = Diagnostic radiography programme

T = Therapeutic radiography programme

Diagnostic and therapeutic radiography programmes at the same EI have been allocated different numbers, e.g. T8 and D8 are *not* the same EI.

Larger numbers indicate fewer students per member of staff.