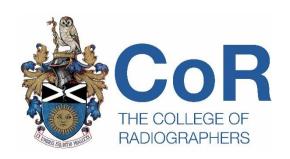
Approval and Accreditation Board

Annual Report 1st September 2016 – 31st August 2017



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1 Foreword

The College of Radiographers is pleased to present the Approval and Accreditation Report for 2016-17.

The academic year 2016-17 has been a particularly busy year for both Higher Education Institutions and the Approval and Accreditation Board, AAB, with a considerable number of influential developments within the field of radiography education for both therapeutic radiography and diagnostic radiography. Alongside a considerable number of external factors that have impacted on health education, the Approval and Accreditation Board has worked to ensure that there is a high standard of consistency of review of programmes that lead to eligibility to apply for professional registration as a radiographer, and for individual learning modules, CPD courses and short education courses. It is also important to acknowledge and thank College of Radiographers' Assessors for 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. The involvement of the College of Radiographers ensures a consistency of standard across the wide variety of programmes and education providers.

The UK wide apprenticeship levy was not in force during the period covered by this report but apprenticeships were very much in the news during the academic year 2016-17 and the College has been proactive in this development with advice to the trailblazer group through consultation response for the apprenticeship for Senior Healthcare Support Workers. A Trailblazer group was formed for an Assistant Practitioner Standard and out of concerns that this standard did not meet the needs of the breast imaging workforce, plans were developed to create an Associate Mammographer Standard. The College also made robust responses to the Department of Education regarding therapeutic radiographer and diagnostic radiographer being two separate professions and therefore two separate Standards are required. The College is also responded to consultations on the Standards for Advanced Clinical Practitioners. To date, all apprenticeship developments have taken place in England. There appears to be little appetite from employers in Wales, Northern Ireland and Scotland to develop preregistration therapeutic and diagnostic radiographer standards.

During 2016-17, a difficulty arose regarding recruitment into therapeutic radiography programmes. University targets were met (a number of universities entered clearing for therapeutic radiography programmes) but, in response to this, the College raised serious concerns regarding this issue with Higher Education Funding Council for England, Health Education England and the Council of Deans of Health.

The Health and Care Professions Council, HCPC, consulted on its proposals for revising the Standards of Education and Training, SETs, and the College was active in its response to this consultation prior to the HCPC publishing the revised SETs in June 2017.

The Teaching Excellence Framework, TEF, for HEIs was developed during this time period and universities were awarded, according to criteria, bronze, silver or gold awards. The majority of universities providing pre-registration diagnostic and therapeutic radiography programmes were awarded gold or silver.

In addition to these considerable involvements, the College, through the AAB, has continued to undertake accreditation and re-accreditation of Assistant Practitioners, Advanced Practitioners and

Consultant Practitioners. These processes, carried out by AAB members, ensure the continuation of high standards of the quality of care to service users who attend radiotherapy or imaging services.

Many thanks to all the HEIs who have provided data regarding their courses as this is very useful to individual organisations as they review their own provision during their internal quality review processes.

Erica Chivers.

Chair, Approval and Accreditation Board

2 Introduction

The College of Radiographers (CoR) is pleased to publish the 2016-2017 Approval and Accreditation Board (AAB) Report.

The purpose of the 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 Education Institution Annual Pre-Registration 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 commissioners and funders of radiography education of trends in student applications, retention, support and completion, and to identify examples of innovative practice related to student support.

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 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 presented. Much of the data collected in previous years are useful but not necessarily required on an annual basis. Data on research topics, practice educators and qualifications have not been collected this year. However, these topics will be gathered again in the annual monitoring survey for 2017-2018.

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. The University of Bradford did not supply any data for their pre-registration diagnostic radiography programme. The programme team have not provided reason or explanation.

Where anomalous data has been provided previously which affects year on year comparisons, this has been highlighted within the relevant sections of this report. More anomalous data has been submitted this year than in the previous six years. This throws into question the reliability and thus, usefulness of the data to both education providers and external stakeholders.

The Approval and Accreditation Board 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 which have significant impact upon the provision of diagnostic and therapeutic radiography education. Thank you especially to the vast majority who returned the 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 and will also be available in the document library on the Society of Radiographers' website.

The Approval and Accreditation Board anticipate that this year's report will provide much food for thought and ideas for the future.

2.1 Key points

- 1. A full dataset was not received this year. One diagnostic radiography programme did not submit data. No reason was given.
- 2. Diagnostic and therapeutic radiography attrition has increased for the first time since 2008. The increase takes into account the likely number of students retained by the education provider which did not submit data.
- 3. Placement teaching and learning pedagogies were not mentioned by any education provider in relation to retaining students. This is concerning with regard to the implementation of apprenticeships, as clinical employers will soon have to take a considerably enhanced role in the learning and teaching of their employees.
- 4. Most therapeutic radiography programmes' number of campus based staff has remained constant or has increased. However, there are three programmes which have reduced the number of campus based staff. Two of these programmes now have fewer than three full time equivalent lecturers to deliver their programmes.
- 5. There are more education providers with no practice educators supporting their students than there were 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 2016 - 2017 academic year which ran from 1st September 2016 – 31st August 2017.

Data were collected via the online survey system, Survey Monkey[®]. Each education lead was sent an email with a link to access the survey and a copy of the questions. This enabled the education institution leads to collect the relevant data prior to filling in the survey.

As with previous data gathering, the decision was made to disseminate the survey with a mid-December deadline for responses. This date was chosen to ensure that all education providers' final progression boards had taken place. However, there were still some students recorded as not having yet completed the programme. Clarification was sought from all education providers that reported students had not yet completed and these data can be found in section 6.9.4.

Students and newly qualified diagnostic and therapeutic radiographers were surveyed by the College of Radiographers and data from that survey are published in the *Analysis of students and recent graduates survey 2014* (Society and College of Radiographers,

2014).(https://www.sor.org/learning/document-library/analysis-student-and-recently-qualified-radiographers-survey-2014). Comparisons and discussion around similarities and differences between that survey's results and those presented here are outwith the scope of this report.

Student attrition data are anonymised within this report. Education providers should be able to recognise their own data or can contact the Professional and Education department at the Society and College of Radiographers (SCoR) and ask for their randomised code used within this report: PandE@sor.org.

4 Services to education institutions and students

The College of Radiographers provides many services to both education institutions and students. Most education provider services are dealt with by the Professional and Education team while students initially fall under the remit of the Membership team but may be directed to relevant members of other teams as necessary.

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

Within 2016-2017 there was a small increase in the fees charged for approval services. Education providers who take advantage of the Annual Inclusive Package can take advantage of the following services:

- Consultancy and advice on proposed education developments and provision, and on curriculum developments.
- Approval by the College of Radiographers 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 continuing professional development programmes per year (and by negotiation for additional programmes thereafter).
- Full access for all staff of the education institution to the College's digital document library.
- Inclusion of approved courses on the Society of Radiographers' website which is linked to the radiography careers website (www.radiographycareers.co.uk). Inclusion in other careers and courses information provided by the SCoR.
- 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 leads, or heads of schools.
- 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; qualified practitioners undertaking approved master's 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 due date.
- Inclusion in specific professional forums and working groups established from time to time, for example, the Education and Career Framework or Code of Conduct.

On payment of the relevant fee, these services are individually available to education providers who do not purchase the Annual Inclusive Package.

4.2 Students

The Student Membership Package is similar to the Annual Inclusive Package except that education providers pay £48 per student, per year. The fee for this package was not increased within 2016 - 2017. It includes all the previously listed services of the Annual Inclusive Package and membership for all students.

This package includes the following services:

- Year one students: complimentary membership of the Society of Radiographers, subject to their University supplying personal details sufficient to set up a membership record for each student; and each student completing an application and direct debit form (for continuing years).
- For all continuing and final year students, membership is £4 per month / £48 per year included in this package.
- Visit by a SCoR professional officer or regional/national officer within the first two months of course commencement.
- In continuing and final years, two further visits to students are made by the professional body.
- Students maintaining membership for the whole of their education programme receive six months' complimentary full membership on qualifying.
- A welcome booklet and pack for all year one students taking up membership at the start of their programme, delivered by professional or regional/national officer during the initial student talk.
- Students receive an electronic (digital) subscription to Synergy News (monthly 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 make contributions to Synergy News.
- An electronic (digital) subscription to Imaging and Therapy Practice is also provided, featuring practice-related topics and a range of continuing professional development 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 also receive a monthly e-zine, *StudentTalk*, with content particularly relevant to students. Again, student contributions are welcomed.
- *Radiography*, the profession's peer reviewed journal, is published quarterly and full access to this is provided through the members' section of www.sor.org/learning/library-publications.
- Electronic access to all other publications in the Society and College of Radiographers' digital document library accessed through www.sor.org/learning/document-library.
- Full access to the website <u>www.sor.org</u> with dedicated sections for students and a wide range of briefings, advice and guidance material (some student specific), resources to support practice, career planning advice, learning resources, on-line job advertisements (available from the time they are placed) and on-line access to all publications and journals produced by the SCoR.

- Full access to CPD Now, the Society of Radiographers' web-based continuing professional development tool, again through the website.
- Opportunity to follow the profession on Twitter® http://twitter.com/SCoRMembers.
- 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 related issues.
- Indemnity insurance and certificates for clinical placements (including electives 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 radiography helper or, when appropriate, as an accredited assistant practitioner (subject to this being annotated in the individual's Society of Radiographers' 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:
 - o Attend the Annual Student Conference.
 - Become a member of the Student Working Party which advises on the Annual Student Conference programme.
 - Become an office-holder in the relevant regional committee (RC) or national council (NC).
 - Be part of an RC/NC delegation at the Society of Radiographers' (SoR) Annual Delegate Conference (SoR Members' policy advisory conference).
 - o Be nominated to be an observer in attendance at the UK Council of SoR.
- Opportunities to join and participate in any of the national networks facilitated by the SCoR (e.g., Equalise, the SoR's equality network).
- Opportunity and encouragement to engage with special interest groups recognised by SCoR.
- Access to the Society of Radiographers' Benevolent Fund, according to its rules.
- Other benefits as they arise from the Society of Radiographers' students' working party (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, career development opportunities, etc.).

5 Assistant practitioner education programmes

The number of approved assistant practitioner programmes has fallen again this year as some previously approved programmes are not running and/or have not been submitted for re-approval.

The number of requests from service providers for assistant practitioner programme information has remained constant, indicating that there is still a demand from clinical practice. This year there was a significant increase in requests for information about assistant practitioner apprenticeships both from employers and those seeking to become apprentices. An assistant practitioner apprenticeship has been approved for delivery in England but to date, no education provider is running it specifically for clinical imaging or radiotherapy apprentices.

5.1 Approval/re-approval of assistant practitioner programmes

During the year 2016-2017, the College of Radiographers approved two programmes related to assistant practitioners.

Education Institution	Programme type	Award
St George's NHS and The Jarvis Breast Education Centres	Short course	Mammography Assistant Practitioner Training Programme
University of Derby	Short course	Assistant Practitioner to Radiographer Programme

Table 1 Table showing education institutions that had programmes related to assistant practitioners approved during the academic year 2016-2017.

Assistant practitioners who successfully complete the Mammography Assistant Practitioner Training Programme are eligible to apply for accredited assistant practitioner status and inclusion on the public voluntary register of assistant practitioners (College of Radiographers, n.d.), https://www.sor.org/career-progression/assistant-practitioners/accredited-ap-register.

Programmes that were approved by Chair's action following the June 2017 AAB will be reported in next year's annual report.

Recruitment, retention and completion data from assistant practitioner programmes do not fall within the scope of this report.

6 Pre-registration programmes

Programme data collected via the annual survey relates to pre-registration programmes. These programmes normally constitute most of the work undertaken by Approval and Accreditation Board assessors. This year there were 6 programmes approved.

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 cycle. Approval and Accreditation Board approval 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 with other programmes they run.

Programmes that were approved by Chair's action following the June 2017 AAB will be reported in next year's annual report.

Table 2 shows a comparison of the number of full pre-registration programmes approved in this and previous years. It includes both undergraduate and postgraduate approvals leading to eligibility to apply for registration with the Health and Care Professions Council. This table does not include requests for approval of additional placements, new campus facilities or approval extensions.

Modality	Number of programmes approved 2012-2013	Number of programmes approved 2013-2014	Number of programmes approved 2014-2015	Number of programmes approved 2015-2016	Number of programmes approved 2016-2017
Diagnostic radiography	6	6	3	6	3
Therapeutic radiography	3	4	2	5	3

Table 2 Table comparing pre-registration programme approvals during the academic years 2012-2016.

Details of education providers who had complete pre-registration programmes approved, approval extended or adapted are shown in Table 3.

Education Institution	Award
Queen Margaret University	MSc Radiotherapy and Oncology
	MSc/PgD Diagnostic Radiography
London South Bank University	BSc (Hons) Diagnostic Radiography (full-time and part-time routes)
	BSc (Hons) Therapeutic Radiography
	MSc/PgD Therapeutic Radiography
Birmingham City University	BSc (Hons) Radiotherapy – change of module credits
	BSc (Hons) Diagnostic radiography – change of module credits
University of Salford	BSc (Hons) Diagnostic Radiography
University of Hertfordshire	BSc (Hons) Diagnostic Radiography and Imaging – 1 year extension
	BSc (Hons) Radiotherapy and Oncology – 1 year extension
Kingston and St George's University, London	BSc (Hons) Diagnostic Radiography – 1 year extension
	BSc (Hons) Therapeutic Radiography – 1 year extension
Sheffield Hallam University	MSc Radiotherapy and Oncology in Practice

Table 3 Table showing education institutions that had complete pre-registration programmes approved or approval extended or adapted during the academic year 2016-2017.

Education providers are required to obtain approval by the College of Radiographers for new campus facilities, additional placements or placement sites. Table 4 shows the education providers who had new placements or facilities approved during 2016-2017.

Education Institution	Approval granted
University of Ulster	BSc (Hons) Radiotherapy and Oncology – New placement site

Table 4 Table showing education institutions that had additional placements, new campus facilities or changes in module credits approved during the academic year 2016-2017.

6.2 Duration of pre-registration radiography programmes

In the academic year 2016-2017 there were 24 education providers offering College of Radiographers approved pre-registration programmes in diagnostic radiography. There were 14 offering approved therapeutic radiography pre-registration programmes. Table 5 shows the number of pre-registration education programmes of 2, 3 and 4 years' duration that are currently approved. 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 years (postgraduate)	2	4	
3 years (postgraduate)	0	1	
3 years (undergraduate)	22	12	
4 years (undergraduate – Scotland)	3	2	

Table 5 Table showing the number of full time and part time diagnostic and therapeutic radiography pre-registration programmes available during the academic year 2016-2017.

6.3 College of Radiographers approved places

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, or additionally in Scotland, Northern Ireland and Wales the number of students funded/allocated. Placements must be able to provide a supportive and high quality clinical learning environment for students. Currently the College of Radiographers 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.

In England, students have no longer been commissioned by Health Education England (HEE) since 1st August 2017. However, placements are still commissioned by them and funded through the Education and Training Tariff (ETT). Most imaging and radiotherapy departments report being unable to access the ETT as it is paid to the top-level finance department rather than the placement department. SCoR has been raising awareness of the ETT for a number of years with department managers, practice educators and education providers.

SCOR, along with other health professional bodies and trade unions, has for a number of years, expressed concern to HEE that the funding intended to support pre-registration learners is not being used for the purpose it is intended. HEE have responded and indicated that they do not audit what the ETT is used for though its purpose is clear within their guidance.

Practice educators and service managers report via College of Radiographers' advisory meetings and forums that the number of students placed is frequently more than they can effectively support. The College of Radiographers mandates in the Standards that there must be robust placement agreements in place between the education provider(s) and the placement host. The College of

Radiographers also mandates that the quality of the placement and the support provided must be audited at least annually. In England, the removal of HEE commissions means that robust agreements are even more critical.

6.4 Commissioned, funded or allocated students

The commissioning, funding or allocation mechanisms are different within each of the countries of the UK (Table 6). In England, commissioning of students, but not placements, ceased on the 1st August 2017

Country	Commissioning/funding/allocation model
England	Until 31 st July 2017 HEE geographies commission students and fund placement through the ETT.
	From the 1 st August 2017 HEE will commission placements only. Education providers are free to decide how many students they have capacity and resources to accept onto the programmes. However, placements are a limiting factor.
Wales	Students are commissioned by the NHS Wales Shared Services Partnership: Workforce and Education Development Service. Individual professions are considered, including those considered shortage occupations.
Scotland	Students are allocated by the Scottish Funding Council. Funding is distributed to the education providers who decide how many students to recruit based on specific workforce shortages.
Northern Ireland	Students are commissioned by the Department of Health, Social Services and Public Safety based on workforce policy and advice from professional bodies and other key stakeholders.

Table 6 Table showing the commissioners, funders and allocators for student education in the UK.

6.4.1 Diagnostic radiography commissioned, funded or allocated students

Several education providers submitted anomalous data this year.

- University of Bradford did not submit data
- University of Teesside indicated no students were commissioned for their BSc (Hons) programme.
- Queen Margaret University indicated that no students were allocated to their BSc (Hons) programme.
- Queen Margaret University indicated that no students were allocated to their PgD/MSc programme.

No education provider explained the anomalous data or provided information that the programme did not run.

The omitted data means that Scottish, English and UK actual number of commissioned or allocated students is likely to be higher than reported in Table 7.

Country	Number of students commissioned/allocated/funded	
England	1072 students (change unable to be determined)	
Wales	100 students (increase of 4 students from 2015-2016)	
Scotland	99 students (change unable to be determined)	
Northern Ireland	48 students (no change from 2015-2016)	
United Kingdom	1319 students (change unable to be determined)	

Table 7 Table showing the increase or decrease of diagnostic radiography commissioned, funded or allocated students across the four countries of the UK. Total number of commissions/allocations/funded students per country has been calculated from data provided and includes anomalous or missing data.

6.4.2 Therapeutic radiography commissioned, funded or allocated students

One education provider submitted anomalous data.

 Queen Margaret University indicated that no students were allocated to their BSc (Hons) programme.

The omitted data means that Scottish and UK actual number of commissioned or allocated students is likely to be higher than reported

Country	Number of students commissioned/allocated/funded	
England	388 students (increase of 3 students)	
Wales	22 students (no change from 2015-2016)	
Scotland	42 students (change unable to be determined)	
Northern Ireland	16 students (no change from 2015-2016)	
United Kingdom	468 students (change unable to be determined)	

Table 8 Table showing the increase or decrease of therapeutic radiography commissioned, funded or allocation students across the four countries of the UK. Total number of commissions/allocations/funded students per country has been calculated from data provided and includes anomalous or missing data.

6.5 Applications received

The year 2014-2015 was the first time application data had been gathered and a comparison can be made between the three following years. These data provide a useful benchmark to ascertain the effect of the changes to student funding in England. A summary of UK data has been provided below, followed by country-specific data. The full dataset can be found in Appendix A and Appendix B.

Data has been presented as reported by education providers. Where anomalous data has been provided, this has been noted. Due to these anomalous data, it was decided not to include the percentage change in applications as the figure could not be guaranteed with any degree of accuracy.

6.5.1 Diagnostic radiography applications - UK

Data	2014-2015	2015-2016	2016-2017
Applications	12,060 (likely to be higher)	13,228	12,505 (likely to be higher)
Commissions/funding/ allocations	1,225 (likely to be higher)	1,377	1,319 (likely to be higher)
Application/commission ratio	9.84 students for each funded place (likely to be higher)	9.61 students for each funded place	9.48 students for each funded place (unable to determine likely actual ratio due to missing and anomalous data)

Table 9 Table showing a summary of the diagnostic radiography applications to commissions ratio for the UK.

Despite the missing and anomalous data (Table 9) it is likely that applications for diagnostic radiography programmes were higher than reported. However, the actual ratio between applications and commissions is impossible to determine.

6.5.2 Diagnostic radiography applications - England

Data	2014-2015	2015-2016	2016-2017
Applications	10,193 (likely to be higher)	11,365	10,476 (likely to be higher)
Commissions/funding/ allocations	1,008 (likely to be higher)	1,120	1,072 (likely to be higher)
Application/commission ratio	10.11 students for each funded place (likely to be higher)	10.15 students for each funded place	9.77 students for each funded place (unable to determine likely actual ratio due to missing and anomalous data)

Table 10 Table showing a summary of the diagnostic radiography applications to commissions ratio for England.

It is impossible to determine if England only applications have increased or decreased due to missing data. Table 10 presents figures based on the data submitted.

6.5.3 Diagnostic radiography applications – Wales

O	0 1 7 11		
Data	2014-2015	2015-2016	2016-2017
Applications	751	745	774
Commissions/funding/ allocations	73	94	100
Application/commission ratio	10.29 students for each funded place	7.93 students for each funded place	7.74 students for each funded place

Table 11 Table showing a summary of the diagnostic radiography applications to commissions ratio for Wales.

There was an increase in student commissions in Wales (Table 11) which was accompanied by an increase in the number of applicants. The ratio of students to places has decreased showing that there were more students applying for each commissioned place.

6.5.4 Diagnostic radiography applications – Scotland

Data	2014-2015	2015-2016	2016-2017
Applications	918	918	1,016
Commissions/funding/ allocations	96 (likely to be higher)	115	99 (likely to be higher)
Application/commission ratio	9.56 students for each funded place (likely to be lower)	7.98 students for each funded place	10.26 students for each funded place (likely to be lower)

Table 12 Table showing a summary of the diagnostic radiography applications to commissions ratio for Scotland.

Despite Queen Margaret University indicating that they were allocated no diagnostic radiography students, the education provider has included application data. Data from all three Scottish universities shows that there was an increase in applications (Table 12).

6.5.5 Diagnostic radiography applications – Northern Ireland

Data	2014-2015	2015-2016	2016-2017
Applications	198	200	239
Commissions/funding/ allocations	48	48	48
Application/commission ratio	4.13 students for each funded place	4.17 students for each funded place	4.98 students for each funded place

Table 13 Table showing a summary of the diagnostic radiography applications to commissions ratio for Northern Ireland.

The number of applications increased in Northern Ireland (Table 13) and the funded places has not changed.

6.5.6 Therapeutic radiography applications - UK

Data	2014-2015	2015-2016	2016-2017
Applications	2760	2,761	2,738
Commissions/funding/ allocations	449 (likely to be higher)	478	468 (likely to be higher)
Application/commission ratio	6.15 students for each funded place (likely to be lower)	5.78 students for each funded place	5.85 students for each funded place (unable to determine likely actual ratio due to anomalous data)

Table 14 Table showing a summary of the therapeutic radiography applications to commissions ratio for the UK.

Throughout the UK, there was a decrease in the number of applications to therapeutic radiography programmes (Table 14). However, the actual ratio between applications and commissions is impossible to determine due to anomalous data.

6.5.7 Therapeutic radiography applications - England

Data	2014-2015	2015-2016	2016-2017
Applications	2125	2145	2186
Commissions/funding/ allocations	373	385	388
Application/commission ratio	5.89 students for each funded place	5.41 students for each funded place	5.63 students per funded place

Table 15 Table showing a summary of the therapeutic radiography applications to commissions ratio for England.

There was a slight increase in the number of applications received in England (Table 15). The number of commissioned places also increased slightly leading to an increased ratio of applicants to funded places.

6.5.8 Therapeutic radiography applications – Wales

Data	2014-2015	2015-2016	2016-2017
Applications	206	129	129
Commissions/funding/ allocations	21	22	22
Application/commission ratio	9.81 students for each funded place	5.86 students for each funded place	5.86 students for each funded place

Table 16 Table showing a summary of the therapeutic radiography applications to commissions ratio for Wales.

Exactly the same number of applications were received for the therapeutic radiography programme in Wales this year (Table 16). Student commissions did not change.

6.5.9 Therapeutic radiography applications – Scotland

Data	2014-2015	2015-2016	2016-2017
Applications	324	347	274
Commissions/funding/ allocations	39 (likely to be higher)	55	42 (likely to be higher)
Application/commission ratio	8.31 students for each funded place (likely to be lower)	6.31 students for each funded place	6.52 students for each funded place (likely to be lower)

Table 17 Table showing a summary of the therapeutic radiography applications to commissions ratio for Scotland.

Despite Queen Margaret University indicating that they were allocated no therapeutic radiography students, the education provider has included application data. Data from both Scottish universities shows that there was a significant decrease in applications (Table 17).

6.5.10 Therapeutic radiography applications – Northern Ireland

Data	2014-2015	2015-2016	2016-2017
Applications	105	140	149
Commissions/funding/ allocations	16	16	16
Application/commission ratio	6.56 students for each funded place	8.75 students for each funded place	9.31 students for each funded place

Table 18 Table showing a summary of the therapeutic radiography applications to commissions ratio for Northern Ireland.

There has been an increase in applications in Northern Ireland which has had a positive impact on the applications to commissions ratio (Table 18).

6.6 Student intake

As normal, there is variation between the number of students commissioned, funded or allocated and the actual number of students who begin the programme. This variation is shown for diagnostic and therapeutic radiography in Figure 1 and Figure 2. As previously, the reader must exercise a degree of caution due to the missing and anomalous data provided this, and previous years. However, the charts serve to provide evidence that education providers have not been significantly over or under recruiting compared to commissioned, funded or allocated student admissions.

Only one programme provider gave a reason for the under or over recruitment of students. This was for a therapeutic radiography programme and was an education provider who had previously indicated that they had no BSc (Hons) students allocated to them, i.e., they submitted anomalous data. The reason for under recruitment was given as "insufficient applications".

6.6.1 International students

If there are placements available which have not been filled by commissioned, funded or allocated students then education providers may choose to take international or other fee-paying students. In previous years this has happened rarely due to commissioners/funders/allocators taking all available spaces. In 2014-2015 there were noticeable increases in the number of international students but 2015-2016 saw this figure decrease, perhaps due to the increased number of students being commissioned/funded/allocated. This year saw a slight increase on both diagnostic and therapeutic radiography programmes.

The number of international students recruited in 2016-2017 is shown for diagnostic radiography in Table 19 and for therapeutic radiography in Table 20.

6.6.1.1 Diagnostic radiography international students

Country	2012 - 2013	2013 - 2014	2014 - 2015	2015 - 2016	2016-2017
England	12	11	18 including anomalous data 7 excluding anomalous data	5	8
Wales	3	3	1	0	0
Scotland	0	2	0	2	2
Northern Ireland	0	0	1	0	0

Table 19 Table showing the number of international students admitted to diagnostic radiography programmes during the academic years 2012-2016.

The ten international diagnostic radiography students were admitted between five education institutions.

6.6.1.2 Therapeutic radiography international students

The number of international students admitted to therapeutic radiography programmes increased this year to five students.

Country	2012 - 2013	2013 - 2014	2015 - 2015	2015 - 2016	2016-2017
England	2	1	1	1	1
Wales	0	0	0	0	0
Scotland	0	0	0	1	4
Northern Ireland	0	0	0	0	0

Table 20 Table showing the number of international students admitted to therapeutic radiography programmes during the academic years 2012-2016.

Three therapeutic radiography programmes accepted international students.

6.7 Comparison of commissioned/funded/allocated and admitted students

Comparisons can be made with data provided via the annual survey in previous years, remembering that there have been anomalous data submitted.

6.7.1 Diagnostic radiography

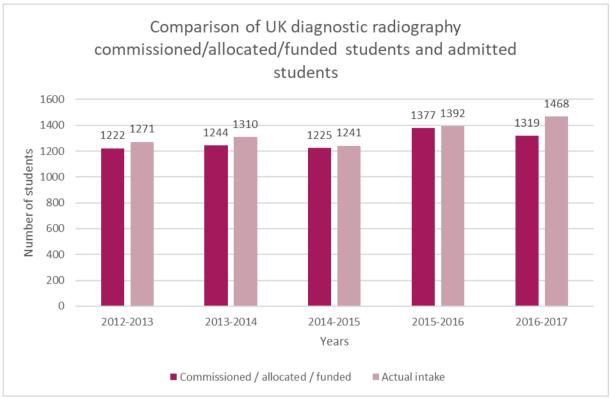


Figure 1 Chart showing the number of commissioned/funded/allocated diagnostic radiography students compared to admitted students in the UK through the past five academic years.

In 2016-2017, as with previous years, it appears that more students were admitted than were funded. However, this difference appears to be greater than it probably is due to education providers submitting anomalous data. A small part of this difference could also be explained by the admission of international students. Where there is a genuine mismatch between commissioned/funded/allocated and admitted students, it is not possible to say if the local commissioners/funders/allocators paid for these extra students and their placements or if the universities bore the cost of training them.

This year, education providers indicated that a significant number of students funded their own course fees and/or placement costs.

Country	2015 - 2016	2016-2017
England	5	120
Wales	0	2
Scotland	43*	40*
Northern Ireland	0	0

Table 21 Comparison of diagnostic radiography students across the UK who paid their own course fees and/or placement costs.

^{*}One education provider stated all their students paid fees. Previously they have stated all their students had fees paid. There have been no funding changes in Scotland during this period.

The large increase in the number of students in England paying their own fees and/or placement costs cannot be explained. Students who started their training in the academic year 2016-2017 were still eligible to have their fees paid as funding changes did not come into effect until 1st August 2017, i.e., for the academic year 2017-2018.

6.7.2 Therapeutic radiography

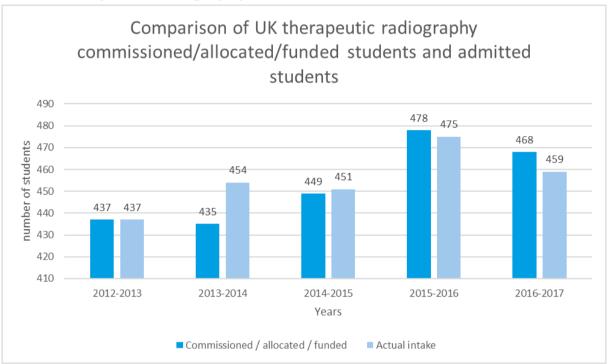


Figure 2 Chart showing the number of commissioned/funded/allocated therapeutic radiography students compared to admitted students in the UK through the past five academic years.

Therapeutic radiography programmes appear to have admitted fewer students than were commissioned/funded/allocated. However, the UK difference represents just eleven students.

Therapeutic radiography education providers indicated that a number of students funded their own course fees and/or placement costs.

Country	2015 - 2016	2016-2017
England	1	2
Wales	0	0
Scotland	12*	26*
Northern Ireland	0	0

Table 22 Comparison of therapeutic radiography students across the UK who paid their own course fees and/or placement costs.

^{*}One education provider stated all their students paid fees. Previously they have stated all their students had fees paid. There have been no funding changes in Scotland during this period.

6.8 Student attrition from pre-registration programmes

Confident comparisons can be drawn between this year's and previous years' data with regards to student attrition. However, data may not be comparable with education commissioner's data owing to differences in defining "attrition". For example, Health Education England currently uses an attrition formula that takes into account transfers between courses and education providers. The College of Radiographers does not count transfers, preferring instead to consider that a student wishing to leave one institution is attrition. If they then join the programme at another institution this may lead to strengthening of that cohort – positive attrition.

Attrition has been calculated using the following formula:

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

So = Number of students starting the programme

 S_c = Number of students who have completed the programme in 2013 - 2014

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

Data gathering was timed in order to try to capture all students, including those who had to re-sit assessments and were presented at autumn boards. However, at the point of data capture, there were still students who were due to qualify in the future. The data presented in this report assumes that those still to complete the programme of education have qualified at the time of writing. The number of students with outstanding assessments is captured in section 6.9.4.

It has been possible to include postgraduate pre-registration qualifications within the attrition calculation. It is also possible to break attrition down into separate countries, and to separate undergraduate programmes from postgraduate.

As one diagnostic radiography education provider did not return data, the UK and English attrition data may not accurately reflect actual attrition. However, figures presented should give an indication of student attrition from diagnostic radiography programmes.

Data were collected using the annual survey to determine pre-registration attrition from the following cohorts of students:

- 4 year BSc (Hons) starting in the academic year 2013 2014 in Scotland
- 3 year BSc(Hons) starting in the academic year 2014 2015 in the rest of the UK
- 2 year PgD/MSc starting in the academic year 2015 2016 in the UK

An anonymised table of attrition by programme has been produced. It also shows attrition changes from the previous year. This table can be found in Appendix C.

6.8.1 Diagnostic radiography attrition

Figures in Table 23 are based on submitted data only.

Intake	Total started	Total completed	Total still to complete	Total attrition
BSc (Hons) and PgD/MSc	1,266	1,059	21	14.69 %

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

All but one diagnostic radiography education provider returned attrition data.

Diagnostic radiography student attrition has fallen since the 2008-2009 academic year until now as shown in Figure 3.

Attrition from diagnostic radiography programmes ranges from 0 % (post-graduate programme) to 44 % as shown in Appendix C.

6.8.2 Therapeutic radiography attrition

Intake	Total started	Total completed	Total still to complete	Total attrition
BSc (Hons) and PgD/MSc	428	327	7	22.14 %

Table 24 Number of students that started, completed and are still to complete Therapeutic Radiography BSc (Hons) programmes in the UK leading to the total attrition for therapeutic radiography.

All therapeutic radiography education providers returned attrition data.

Therapeutic radiography student attrition has also fallen since the 2008-2009 academic year and like diagnostic radiography it has increased this year as shown in Figure 3.

Attrition from the rapeutic radiography programmes ranges from -2.17 % (net gain in students) to 47.62 % as shown in Appendix C.

6.8.3 Comparison of attrition data – diagnostic and therapeutic radiography

Attrition data can be compared directly with previous Approval and Accreditation Board reports and is shown in Figure 3. It is possible to compare directly the previous five years' attrition data.

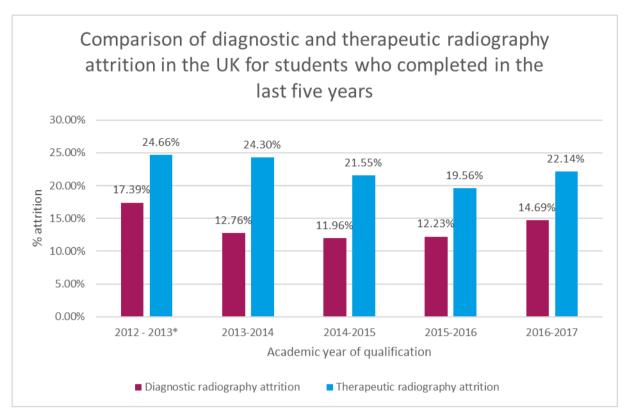


Figure 3 Chart showing comparison of radiography attrition. *BSc (Hons) data only

Both diagnostic and therapeutic radiography attrition has increased this year in comparison to 2015 - 2016.

6.8.4 Reasons students did not complete pre-registration programmes

All data presented in this section comes from the AAB survey. Comparison with other Society or College surveys is outwith the scope of this report. Reasons students leave diagnostic and therapeutic radiography programmes are shown in Figure 4 and Figure 5.

There are several points to note regarding the diagnostic and therapeutic radiography 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 the course leader via the annual survey is the best alternative.
- The annual survey does not ask specifically about bullying and it was not mentioned in any of the "other" responses.
- It is recognised that students *very rarely* leave due to one single reason. It is usually a combination of issues that eventually make students decide to leave the programme. Consequently, Figure 4 and Figure 5 do not show the number of students who left due to each reason.
- "Other" responses include withdrawal due to non-attendance, enrolling but not turning up, interruption or termination of studies due to health reasons, withdrawal due to period of time elapsed since starting the programme and very sadly, the death of a student in their final year.

When students defer the year, they count as attrition for this year but next year will count as an addition to that cohort.

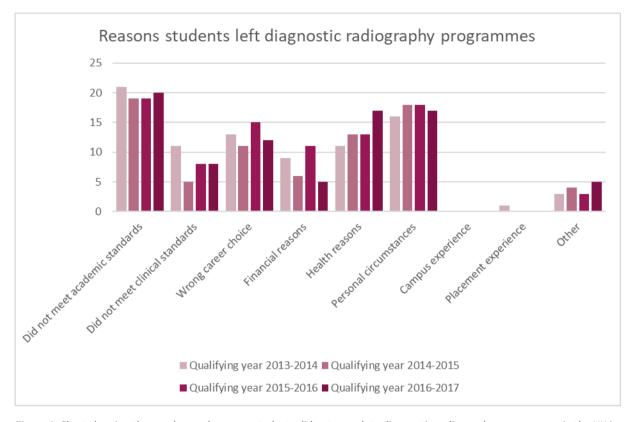


Figure 4 Chart showing the number and reasons students did not complete diagnostic radiography programmes in the UK in this and previous years.

Once again, the most prevalent reason for students to leave diagnostic radiography programmes is that they did not meet the academic standards, followed by personal circumstances and health reasons.

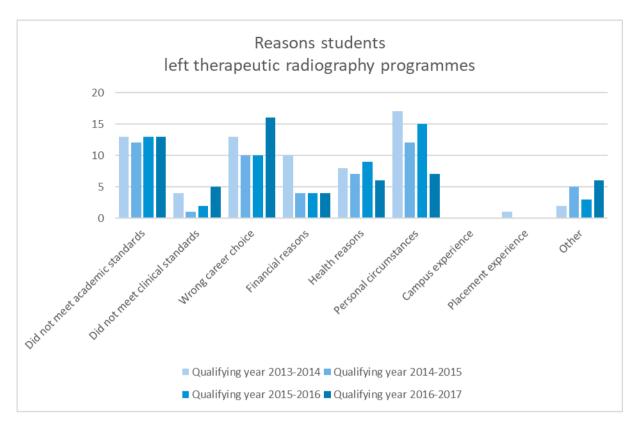


Figure 5 Chart showing the number and reasons students did not complete therapeutic radiography programmes in the UK in this and previous years.

The therapeutic radiography data shows some differences to the diagnostic radiography data. The most commonly reported reason for students leaving a programme was given as wrong career choice followed by not meeting the academic standards.

6.8.5 Successful strategies for reducing attrition

Many successful student retention strategies have been implemented during or prior to the 2016-2017 academic year. The annual survey has captured these data for several years. Once again, respondents provided information about both campus and placement strategies.

Normally within this report full, verbatim responses to this section are included within an appendix. However, due to the length of many of the responses, and the difficulty extracting them and formatting them from the plain text Survey Monkey data output spreadsheet, summaries have been provided in Table 25 and Table 26 only this year.

6.8.5.1 Campus retention strategies

Nine themes emerged from the responses for campus strategies. Some are the same as previous years, such as recruitment and selection, and student support by the programme team and centrally.

Most of the interventions are very time and labour intensive for programme teams and for central support teams. It is very positive to see that a theme to emerge this year is staffing and staff development. A small number of education providers indicated that more staff have been recruited to support students with both diagnostic and therapeutic radiography subjects, as well as wider subjects such as maths and science.

Another positive emergent theme is the student voice. Several education providers indicated that they have implemented or enhanced methods for students to give open and honest feedback to programme teams.

Common themes along with examples are shown in Table 25 and the frequency of the themes for 2016-2017 is shown in Figure 6.

 Study and assessment support Study skills and revision tutorials Feedback sessions Online discussions Academic writing tools 	 Programme team support Provision of personal tutors and formal pastoral support programme Studies and academic advisors Module and year tutors
 Identification of issues and support needs Addressing issues early Signposting to support services Attendance monitoring and tracking Programme team meetings to identify at risk students 	 4) Recruitment and selection Admission tests Multi mini interviews Mandatory clinical visits Careers events attended by programme team
 5) Student support teams Financial advice and support Signposting to student support team Emotional and psychological support School specific support teams 	 6) Student voice Focus groups Year forums and reps Student-staff liaison meetings Active response to student surveys
 7) Campus-placement collaboration Close links with students on campus and placement Increased preparation for first placement Peer assisted learning in preparation for placement Rotation of clinical placements 	 8) Teaching, learning and assessment methods and resources Simulation on campus Flexible attendance pattern Formative assessments Improved student learning facilities
 9) Staff and staff development Recruitment of additional staff Additional training for personal tutors External tutor for maths and science Ensuring well qualified and experienced staff in placement setting 	

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

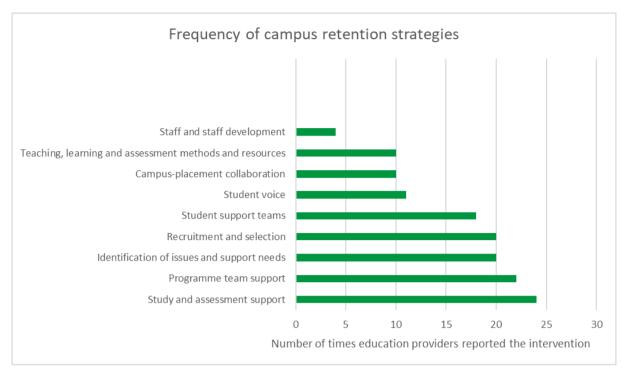


Figure 6 Campus retention strategy themes and frequency of occurrence throughout the UK in 2016-2017.

6.8.5.2 Placement retention strategies

Placement strategies are also similar to previous years. The most common intervention is the provision of practice educators, link tutors, mentors and supervisors. Placement quality is assured by support for practice educators and supervisors and also by good reporting procedures related to concerns. Audit and review, as mandated by the College of Radiographers in the *Quality Standards for Practice Placements* (College of Radiographers, 2012), also feature prominently in the data provided.

There was only one mention of service managers in the placement retention strategies. Managers have ultimate responsibility for students while they are on placement in their department but apart from one programme provider giving and receiving feedback from a student who left the programme there is no mention of them being actively engaged in retention strategies.

It was also noted that there were no comments related to practice teaching and learning pedagogies. Only campus simulation was mentioned. Reflection and professional supervision were mentioned only once each. Students spend in the region of 50 % of their time on practice placements and with the advent of apprenticeships, where employers will need to take a significantly enhanced role in the education and training of their apprentice employees, this is concerning.

There are ten broad themes of support that emerged from the responses for placement strategies which are shown in Table 26 and the frequency of the themes for 2016-2017 is shown in Figure 7.

 1) Practice educators, link lecturers, mentors and supervisors Full time practice educators Named practice educators Regular visits by link lecturers Mentors and assessors from placement 	 Working together and liaison meetings Clinical-academic liaison meetings Regular course meetings Practice educators communicating with programme team Close programme-clinical team working
 Placement audit, evaluation and feedback Regular placement and assessor/supervisor evaluation and audit Feedback to placement department Feed forward constructive criticism Sharing of good practice 	 Student support Addressing pastoral needs on placement Peer mentors from year group above Professional supervision for students on placement One-to-one time for reflection after placement
 Mentor/supervisor training and support Mentor/supervisor training and updates run regularly throughout the year Practice educator and assessor assessment training General staff development sessions Supporting students workshops 	 6) Identification and actions for struggling students • Weekly clinical appraisal system to highlight struggling students • Bespoke action plan for failing students • Early warning systems to identify struggling students • Cause for concern forms
 7) Attendance pattern Clinical practice rotations Practice educators create clinical rota Only one student per machine Not overloading the departments with students 	 8) Preparation for placement Simulation on campus Early acclimatisation to clinical placement First years meeting with third years prior to placement
Practice assessment Clinical partners knowledgeable about assessments and assessment process Formative assessment Table 26 Themes related to successful placement based retain	 10) Recruitment and selection Clinical radiographers taking part in local recruitment events Facilitation of work experience/observational visits for school children

Table 26 Themes related to successful placement-based retention strategies.

Figure 7 shows the placement based retention strategies and frequency of occurrence of these strategies.

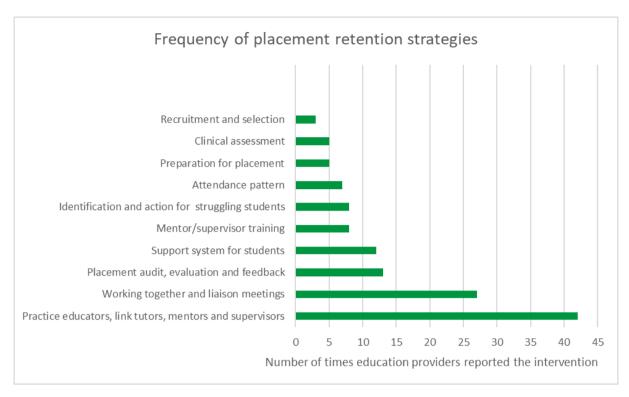


Figure 7 Placement retention strategy themes and frequency of occurrence throughout the UK in 2016-2017.

The College of Radiographers provides an accreditation system for practice educators, the Practice Educator Accreditation Scheme (PEAS). All the allied health professions (AHP) professional bodies have worked together to create joint guidance for practice placements and these were published in spring 2016 (Health and Care Professions Education Leads Group, 2016).

6.9 Completion from pre-registration programmes

According to the data submitted by the education providers, 1053 diagnostic radiography students and 324 therapeutic radiography students were eligible to apply for registration with the HCPC at the point they submitted the survey. This is a decrease for both professions on last year (Table 27) but it must be remembered that one diagnostic education provider did not submit data this year so the number of diagnostic radiographers potentially entering the workforce is likely to be higher.

According to the data submitted by therapeutic radiography education providers, there were 22 fewer students eligible to apply for registration with the HCPC compared to last year. This was due to reductions in the number of students from both BSc (Hons) and PgD/MSc programmes.

Charts showing the distribution of degree classifications for diagnostic and therapeutic radiography BSc (Hons) degrees in the UK, for completion year 2016-2017 are represented in figures 8-11 below.

All education providers completed this section. However, some submitted classification figures which do not correspond with the completion figures submitted, i.e., the sum of the degree classifications does not equal the number of students that completed. The figures as reported have been included in this section, but readers should note the discrepancies.

	Completion of a qualification	Awards leading to eligibility to register	Not eligible to apply for registration
Diagnostic radiography	1055 (likely to be higher)	1053 (likely to be higher)	2
Therapeutic radiography	328	324	4

Table 27 Number of completions and awards in diagnostic and therapeutic radiography programmes in the UK at the time of data submission.

6.9.1 Diagnostic radiography degree classification

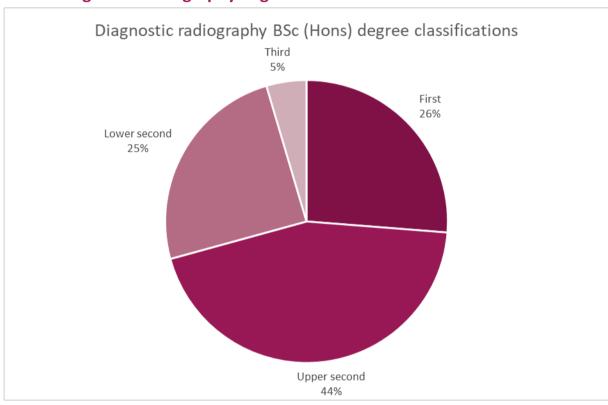


Figure 8 Chart showing distribution of degree classifications for diagnostic radiography BSc (Hons) degrees in the UK for completion year 2016-2017.

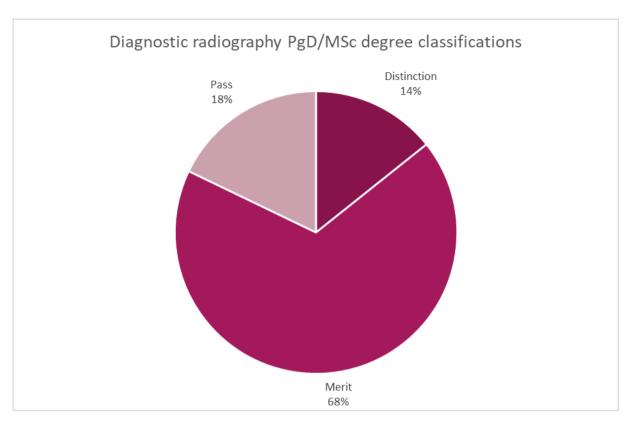


Figure 9 Chart showing distribution of degree classifications for diagnostic radiography PgD/MSc degrees in the UK for completion year 2016-2017.

6.9.2 Therapeutic radiography degree classification

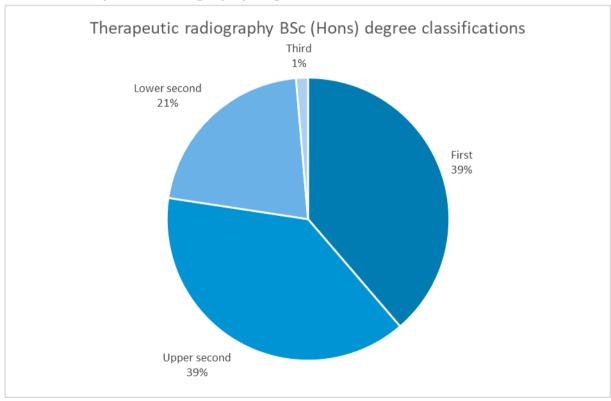


Figure 10 Chart showing distribution of degree classifications for therapeutic radiography BSc (Hons) degrees in the UK for completion year 2015-2016

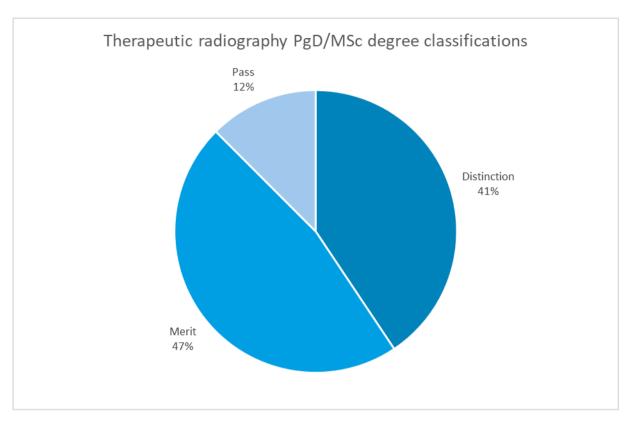


Figure 11 Chart showing distribution of degree classifications for therapeutic radiography PgD/MSc degrees in the UK for completion year 2015-2016

6.9.3 Comparison of degree classifications with previous years

Undergraduate degree classifications are presented in Figure 12 and Figure 13. Postgraduate classifications are presented in Figure 14 and Figure 15.

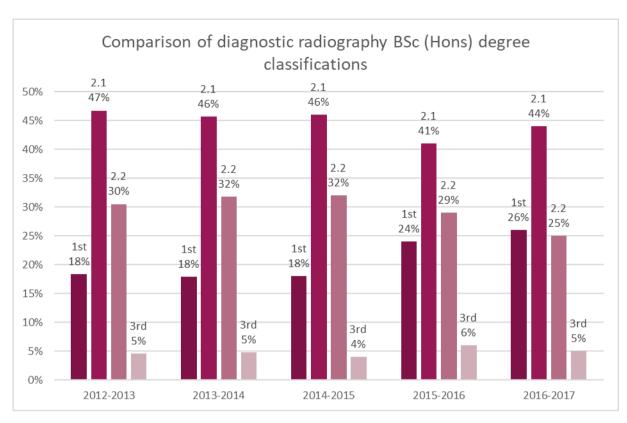


Figure 12 Chart showing five-year comparison of degree classifications for BSc (Hons) diagnostic radiography programmes in the UK

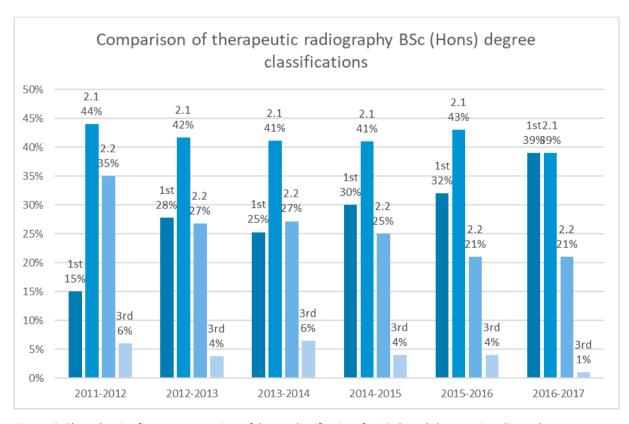


Figure 13 Chart showing five-year comparison of degree classifications for BSc (Hons) therapeutic radiography programmes in the UK

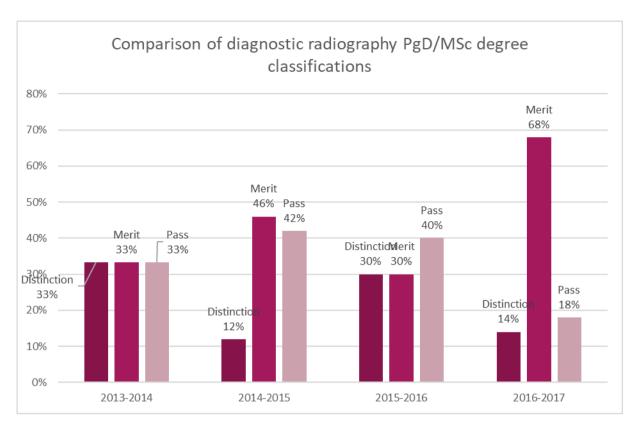


Figure 14 Chart showing three-year comparison of postgraduate degree classifications for diagnostic radiography programmes in the UK

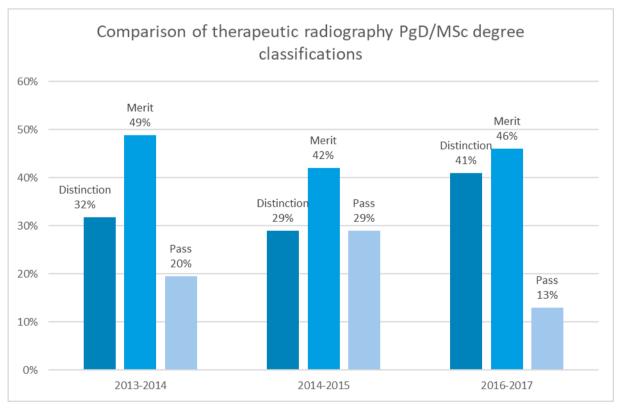


Figure 15 Chart showing three-year comparison of postgraduate degree classifications for therapeutic radiography programmes in the UK

6.9.4 Students still to complete

Despite the deadline for data submission being mid-December, there were still students who had not completed their degree at the point of submission. Reasons for late completion included deferrals for research projects and other modules and completion delays due to mitigating/extenuating circumstances.

Programme	Number of students still to complete
Diagnostic radiography	28
Therapeutic radiography	23

Table 28 Table showing the number of students still to complete at the point the annual survey was completed. Data include undergraduate and postgraduate students.

6.10 Staff establishments

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

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

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

The College of Radiographers does not make recommendations regarding staff/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, between the staff/student ratio, and attrition and retention.

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

Diagnostic radiography campus staff/student ratios 0.35 0.30 0.25 0.20 0.15 0.10 0.05 0.00 Education institution D3 ducation institution D20 ducation institution D13 ducation institution D16 ducation institution D23 Education Institution D9 ducation institution D14 Education institution D6 ducation institution D24 ducation institution D15 Education institution D2 Education institution D5 ducation institution D19 ducation institution D22 Education institution D7 Education institution D8 ducation institution D18 ducation institution D12 Education institution D10 ducation institution D25 Education institution PD6 ducation institution D17 Education institution D1 ducation institution D11 ducation institution D21

6.10.1.1 Diagnostic radiography staff/student ratios

Figure 16 Chart showing the campus staff/student ratios for pre-registration diagnostic radiography programmes in the UK. Education provider D2 did not submit data.

All education providers who submitted, provided data that appear to be realistic in value. Diagnostic radiography staff/student ratios vary from 0.02 (2 members of staff for every 100 students) to 0.34 (34 members of staff for every 100 students). However, the two programmes with the highest ratios are postgraduate pre-registration programmes with fewer students who are likely to share lecturers with undergraduate programmes. The highest ratio for an undergraduate pre-registration programme is 0.09 (9 members of staff for every 100 students).

Taking into account the likely number of lecturing staff from the education provider which did not submit data (based on 2015-2016 data), the number of diagnostic radiography lecturers is likely to have increased.

The mode values of staff/student ratios are 0.4 and 0.5.

Only one of the universities with among the lowest staff/student ratios also has some of the poorest student retention. This is consistent with the previous year's data, though the education provider is not the same. To date, no link can be inferred between the staff to student ratio and attrition.

Therapeutic radiography campus staff/student ratios 0.60 0.50 0.40 0.30 0.20 0.10 Education institution 112 Education institution 110 Education institution pris Education institution 11 A Education Institution P.T.A Education institution 13 Education Institution TS Education institution TA Education institution to Education Institution 13 Education institution is Education institution to Education institution 113 Education institution To Education Institution P. T.O. Education institution PT2 Education institution 12 Education Institution 1

6.10.1.2 Therapeutic radiography staff/student ratios

Figure 17 Chart showing the campus staff/student ratios for pre-registration therapeutic radiography programmes in the

Programme provider PT8 did not admit students this year but they still have 20 students from previous years so it is likely that they did have campus staff associated with the programme.

Therapeutic radiography staff/student ratios have a larger range, from 0.03 (3 members of staff for every 100 students) to 0.51 (51 members of staff for every 100 students). The two programmes with the largest staff/student ratios are postgraduate programmes with a small number of students.

The mode value of staff/student ratios is 0.5.

Taking into account the anomalous data from one education provider who did not run their postgraduate programme (based on 2015-2016 data), it is likely that the number of therapeutic radiography lecturers has decreased.

Programmes T11 and T4 have reduced the number of campus based staff since last year and now have 2.20 and 2.80 full time equivalent campus based staff and both are at the lower end of the staff student ratios. The College of radiographers makes no recommendation as to the number of staff that should deliver each programme as methods of delivery can be very different between education providers. However, there must come a point when teaching and programme administration cannot be covered, especially when two cohorts of students are on campus at the same time. Both these education providers have attrition figures in excess of 30% this year and one demonstrates a considerable increase in attrition from last year.

Three of the institutions with the lowest staff/student ratio also have some of the poorest student retention. Again, these are different institutions compared to the previous academic year and no firm conclusions can be drawn without further research. However, the College of Radiographers, through the Approval and Accreditation Board, will continue to communicate with and monitor those education providers highlighted in this report.

6.10.2 Practice educators

A clear definition of a practice educator was given in the annual monitoring 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 College of Radiographers acknowledges that many different titles are used for this role, though "practice educator" is the most common term and is used throughout College documentation.

The annual survey did not ask who funded practice educator posts, or if they were accredited by the College of Radiographers.

6.10.2.1 Diagnostic radiography practice educator/student ratios

Charts for student/practice educator ratios are difficult to interpret due to two education providers indicating that they respectively have 200 and 615 practice educators that meet the definitions for this role, as stipulated by the College and the Health and Care Professions Education Leads group. Both these education providers are in Scotland and both reported having no practice educators last year. As there are only eight accredited practice educators for both diagnostic and therapeutic radiography located in Scotland, these education providers assertion should be taken with a good degree of caution. Consequently, these two providers have been removed from Figure 18 below.

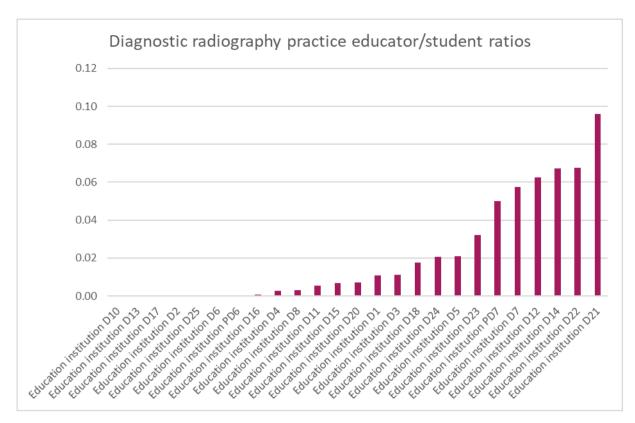


Figure 18 Chart showing the practice educator/student ratios for pre-registration diagnostic radiography programmes in the UK.

Worryingly, the mode value is 0.00. 10 out of 25 programmes report that they have no practice educators supporting students while they are on placement. The number of education providers reporting no practice educators has decreased compared with last year, but it is still a very low number.

6.10.2.2 Therapeutic radiography practice educator/student ratios

Two therapeutic radiography education providers also indicated high numbers of practice educators, 59 and 140 respectively. These same education providers reported 1.40 and 0.00 practice educators last year. One of these providers is in Scotland. These providers have been removed from Figure 19 below.

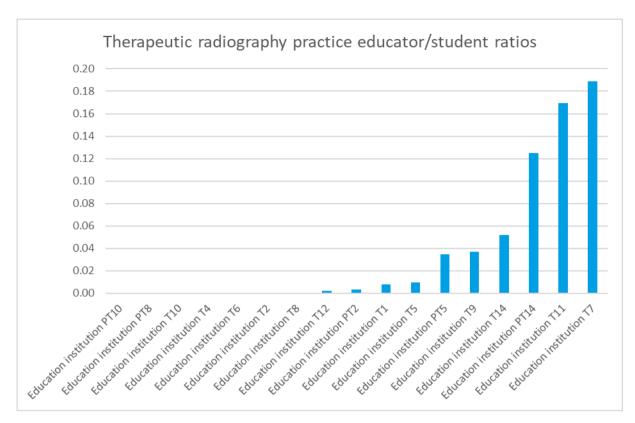


Figure 19 Chart showing the practice educator/student ratios for pre-registration therapeutic radiography programmes in the UK.

Seven education providers report that they have no practice educators supporting their students, making the mode ratio value 0.00. There are more education providers with no practice educators than there were last year.

7 Post-registration programmes

7.1 Approvals/re-approvals of post-registration programmes

The Approval and Accreditation Board considered a variety of post-registration programmes. The figures in Table 29 are programmes which lead to qualifications at Framework for Higher Education Qualifications (FHEQ) level 7 or Scottish Credit and Qualifications Framework (SCQF) level 11 and above, i.e., Postgraduate Certificate/Diploma and MSc/MA.

Programmes which required Approval and Accreditation Board Chair's action following the June 2017 Board meeting will be reported next year.

Speciality	Number of approvals/re-approvals
Clinical imaging including CT, MRI etc.	5
	1 new module only
	1 extension to approval
Breast imaging	1
Nuclear medicine/DEXA	0
Radiotherapy	1
Practice Educator Accreditation Scheme	0
Others including professional and interprofessional provision	0

Table 29 Table showing number of post-registration, post graduate programmes approved in this period.

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

The short courses considered by the Approval and Accreditation Board have been mainly post-registration programmes. However, some programmes are suitable for the unregistered workforce, or those not registered by the Health and Care Professions Council such as assistant practitioners or dental nurses. The approval period for short courses is two years.

Programmes which required Approval and Accreditation Board Chair's action following the June 2017 Board meeting will be reported next year.

The number and variety of short courses approved in 2016 - 2017 is shown in Table 30.

Speciality	Number of approvals/re-approvals
Breast screening	0
Clinical imaging	1
Dental imaging	2
IV administration	5
MRI	0
Nuclear medicine/DEXA	1
Radiotherapy	0
Ultrasound (not eligible for Consortium for the Accreditation of Sonographic Education accreditation)	1
Assistant practitioner programmes leading to College of Radiographers accreditation	1
Others including interprofessional provision	1 AP – pre-registration bridging programme 1 learning support in practice (not leading to practice educator accreditation)

Table 30 Table showing number of short courses approved this period.

9 Accreditation schemes

The College of Radiographers 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

From 1st January 2014 all assistant practitioners who are members of SCoR have had to apply for accreditation through CPD Now. From this date, the number of accredited assistant practitioners has been presented to the Approval and Accreditation Board, but not named, owing to the volume of successful applications.

Approval and Accreditation Board	Number of assistant practitioners presented
November 2016	66
February 2017	59
June 2017	45
Total	170

Table 31 Number of assistant practitioners accredited and presented to the Approval and Accreditation Board during this period.

Clinical imaging and mammography assistant practitioners made up the majority of the applications as with previous years.

There were a mixture of initial and re-accreditation applications during this period, with the majority being re-accreditations. Assistants who have completed College of Radiographers' approved programmes have simply to fill in details of their work area and scope of practice and attach their education certificate. Those who have not completed an approved programme must complete six pieces of relevant continuing professional development (CPD). All re-accreditation applicants must evidence twelve pieces of relevant CPD.

Assistant practitioner applications have been sent to Assessors for review since 15th August 2016.

9.2 Continuing professional development accreditation (CPD Now accreditation)

Those gaining CPD accreditation are not presented to the Approval and Accreditation Board.

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 which meet at least six CPD Now framework outcomes. Members' CPD Now records are not reviewed by the College of

Radiographers, but we reserve the right to audit the records of those who have gained this accreditation.

9.3 Practice educator accreditation scheme

Accredited practice educators have been presented to the Approval and Accreditation Board since February 2017.

Approval and Accreditation Board	Number of practice educators presented
November 2016	n/a
February 2017	5
June 2018	2
Total	7

Table 32 Number of practice educators accredited and presented to the Approval and Accreditation Board during this period.

9.4 Advanced practitioner accreditation

Advanced practitioner accreditations are presented to the Approval and Accreditation Board.

Approval and Accreditation Board	Number of advanced practitioners presented
November 2016	5
February 2017	6
June 2017	5
Total	16

Table 33 Number of advanced practitioners accredited and presented to the Approval and Accreditation Board during this period.

9.5 Consultant practitioner accreditation

Consultant practitioner accreditations are presented to the Approval and Accreditation Board.

Approval and Accreditation Board	Number of advanced practitioners presented
November 2016	5
February 2017	3
June 2017	3
Total	11

Table 34 Number of consultant practitioners accredited and presented to the Approval and Accreditation Board during this period.

10 Continuing professional development event/resource endorsement

Event/resource endorsements are not presented to the Approval and Accreditation Board.

Events and resources are endorsed against one or more of the twenty-three CPD Now framework outcomes. All applications can be endorsed against at least two outcomes and most of them against more.

Applications were received from a variety of education providers including universities, equipment manufacturers, NHS and independent providers of healthcare and private companies. One hundred and four applications were received and endorsed for events held within this reporting period. This is a decrease of six compared with the previous period.

10.1 Health and Care Professions Council

The relationship with the Health and Care Professions Council (HCPC) continued to be maintained and productive. During this period, the HCPC published the new Standards of Education and Training.

Talks also began regarding their new audit evidence submission portal, which the HCPC indicated would be live in time for diagnostic and therapeutic radiographers' CPD audit in December 2017.

10.2 Interprofessional engagement

The College of Radiographers continues to engage with interprofessional organisations, including the Allied Health Professions Education Leads, Professional Associations Research Network and UK Interprofessional Group CPD Forum. These relationships are a valuable source of information and provide excellent networking opportunities for the organisation.

The College of Radiographers also took seat on the National Association for Educators in Practice (NAEP) executive committee. The committee consists of educators and professional bodies and the Association seeks to:

- Value and promote the importance of practice-based learning.
- Support and promote the importance of all health and social care professionals who have an educational role in practice.
- Support the development of educators in practice.

It is recommended that practice educators and those with an interest in practice education join NAEP and take advantage of free membership and their annual conference (National Association of Educators in Practice, n.d.).

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Appendices

Appendix A Application/commissioned, funded or allocated places

- diagnostic radiography

Education institution	Application/commissioned,
	funded or allocated places
Education institution D2	No data provided
Education institution D5	130
Education institution D13	128
Education institution D15	72
Education institution D12	70
Education institution D4	66
Education institution D11	63
Education institution D21	63
Education institution D19	63
Education institution D1	62
Education institution D3	58
Education institution D17	55
Education institution D23	55
Education institution D8	55
Education institution D16	54
Education institution D20	49
Education institution D14	49
Education institution D22	48
Education institution D24	40
Education Institution D9	36
Education institution D18	28
Education institution D10	25
Education institution D25	25
Education institution PD7	25
Education institution D7	0 (anomalous)
Education institution D6	0 (anomalous)
Education institution PD6	Did not run

D = Diagnostic radiography programme

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

El numbers are the same as previous years.

Appendix B Application/commissioned, funded or allocated places – therapeutic radiography

Education institution	Application/commissioned, funded or allocated places
Education institution PT8	Did not run
Education institution T2	55
Education institution T6	41
Education institution T5	39
Education institution T12	37
Education institution T3	34
Education institution T9	32
Education institution T14	30
Education institution T8	27
Education institution T4	27
Education institution T1	24
Education institution PT14	24
Education institution T13	22
Education institution T11	19
Education institution PT5	18
Education institution T7	16
Education institution PT2	15
Education institution PT10	8
Education institution T10	0 (anomalous)

T = Therapeutic radiography programme

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

El numbers are the same as previous years.

Appendix C Randomised and anonymised attrition data figures

Data based on responses to annual survey 2016-2017. Negative attrition indicates programmes that have reported more students completing than originally started e.g., students joining the programme in the continuing years.

Position	Education institution	2016-2017 attrition	Position change from last year
1	Education institution T2	-2.17%	<u>^</u> 7
2	Education institution PD6	0.00%	↑ 17
2	Education institution PT10	0.00%	1
2	Education institution PT8	0.00%	^ 21
2	Education institution T7	0.00%	↑ 32
7	Education institution D19	1.82%	↔0
8	Education institution D21	3.17%	↑ 3
9	Education Institution D9	3.57%	^ 21
10	Education institution D13	5.66%	↑ 5
11	Education institution D18	5.88%	↓ -10
12	Education institution D12	6.25%	V -10
13	Education institution PT2	6.67%	V -10
14	Education institution D20	7.89%	^ 2
15	Education institution D8	8.33%	V -6
16	Education institution D1	8.62%	V -6
17	Education institution D16	8.70%	1 11
18	Education institution D6	9.09%	↓ -7
19	Education institution T8	9.68%	↑ 12
20	Education institution D14	10.00%	^ 2
21	Education institution PD7	13.64%	↑ 12
22	Education institution D3	13.79%	V -19
23	Education institution D4	15.25%	↓ -5
24	Education institution T14	16.67%	↑ 3
25	Education institution D11	16.92%	1 4
26	Education institution D10	18.18%	↓ -1
27	Education institution T6	18.42%	1 7
28	Education institution D7	19.44%	↓ -15
29	Education institution D17	20.00%	V -15
29	Education institution T5	20.00%	↑ 12
31	Education institution D15	20.37%	1
32	Education institution D22	24.49%	↓ -11
33	Education institution PT14	25.00%	V -14
34	Education institution D5	28.33%	1
35	Education institution D23	29.09%	1
36	Education institution T1	29.63%	↓ -33
37	Education institution D24	30.00%	V -13
37	Education institution T11	30.00%	↑ 1
39	Education institution PT5	30.77%	<u>↑</u> 2
40	Education institution T4	31.25%	↑ 6
41	Education institution T12	31.43%	↓ -4
42	Education institution T10	33.33%	V -1
43	Education institution T3	36.00%	↑ 2
44	Education institution T9	37.50%	V -4
45	Education institution D25	44.00%	V -6
46	Education institution T13	47.62%	V -20
-	Education institution D2	0.00%	No data provided

D = Diagnostic radiography programme

T = Therapeutic radiography programme

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

El numbers are the same as previous years.

Appendix D Randomised and anonymised campus staff/student ratios

Data based on responses to annual survey 2016-2017. Education institutions have been allocated the same codes as in other appendices. Data are presented for BSc (Hons) programmes only due to the overlap of staff between these and other programmes.

Education institution	Campus staff/ student ratio
Education institution D2	No data provided
Education institution PT8	Did not run
Education institution D4	0.02
Education institution T3	0.03
Education institution D5	0.03
Education institution D19	0.04
Education institution D3	0.04
Education institution T11	0.04
Education institution D17	0.04
Education institution D20	0.04
Education institution T5	0.04
Education institution D13	0.04
Education institution D1	0.04
Education institution D22	0.05
Education institution D16	0.05
Education institution T12	0.05
Education institution T4	0.05
Education institution D11	0.05
Education institution D23	0.05
Education institution T6	0.05
Education Institution D9	0.05
Education institution T1	0.05
Education institution D14	0.05

Education institution	Campus staff/ student ratio
Education institution T7	0.06
Education institution D6	0.06
Education institution D21	0.06
Education institution D7	0.06
Education institution D8	0.06
Education institution D18	0.06
Education institution T8	0.06
Education institution T9	0.07
Education institution D12	0.07
Education institution D24	0.07
Education institution D15	0.07
Education institution T13	0.08
Education institution D10	0.09
Education institution D25	0.09
Education institution T2	0.10
Education institution T10	0.13
Education institution PD7	0.14
Education institution PT10	0.14
Education institution PT5	0.16
Education institution T14	0.21
Education institution PD6	0.34
Education institution PT14	0.42
Education institution PT2	0.52

D = Diagnostic radiography programme

T = Therapeutic radiography programme

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

Larger numbers represent fewer students per member of staff.

