

Background

This study forms part of a wider project between Health Education England and the University of Winchester exploring Allied Health Professions (AHP) career choices.

An online questionnaire was disseminated to current AHP students in England (undergraduate and postgraduate) for four weeks between February and March 2021. The aim was to explore and understand key motivations, sources of influence and barriers to choosing their specific profession.

The information and findings from the questionnaire will be shared via profession specific factsheets to help shape targeted careers information and guidance. This factsheet focuses on diagnostic radiography as a career of choice.

Diagnostic radiography student population in England

There are currently approximately 4139 active students on diagnostic radiography courses in England.

Survey sample

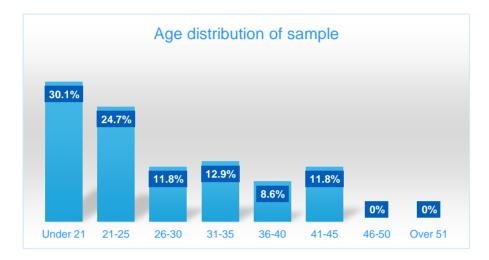
- 93 diagnostic radiography students completed the questionnaire.
- 88.2% of participants were female and 11.8% were male.
- This finding is slightly higher than findings from the Health and Care Professions
 Council (HCPC, 2019) who found that 74% of diagnostic radiographers registered with
 the HCPC were female and 26% of the 28,615 registrants were male.

Ethnicity

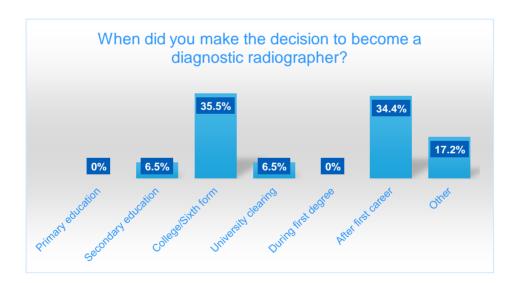
Ethnicity	Percentage of sample
White background	79.6%
Asian background	12.9%
Black, African and Caribbean	4.3%
background	
Other	1.1%
Mixed or multiple ethnic background	0%
Arab background	0%

Age and stage at which participants made the decision to become a diagnostic radiographer

- In our sample, 45.1% of students were over 25.
- This finding is higher than national findings: in 2016/17, over-25s comprised 30% of new enrolments to diagnostic radiography courses in England (Office for Students, 2019).
- There were no students in our sample over the age of 45 but 33.3% of students were over the age of 30.



34.4% of the sample chose to become diagnostic radiographers after their first career.
 42% of the sample had chosen diagnostic radiography during their school/college education.

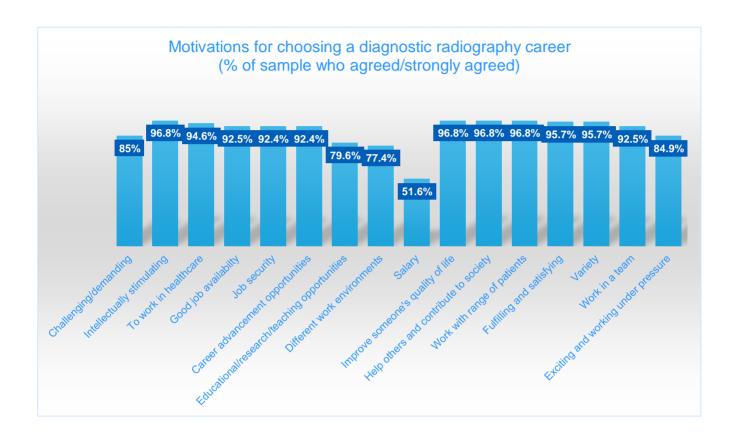


Motivations

Participants were asked to what extent different motivations impacted their diagnostic radiography career choice.

'Where I can use my skills to improve the quality of life for a patient/service user', a
career which was 'intellectually stimulating', 'where I can help others and make a
contribution to society' and 'where I can work with a range of patients/service users' were
the most popular motivations for choosing diagnostic radiography (96.8% of the sample
agreed/strongly agreed with these statements).

- Most commonly identified motivations are shown in the graph below.
- Across 35 motivations listed in the questionnaire, only eight had less than 50% agreeing/strongly agreeing with the importance of the motivation. Fifteen motivations had more than 90% agreeing/strongly agreeing.



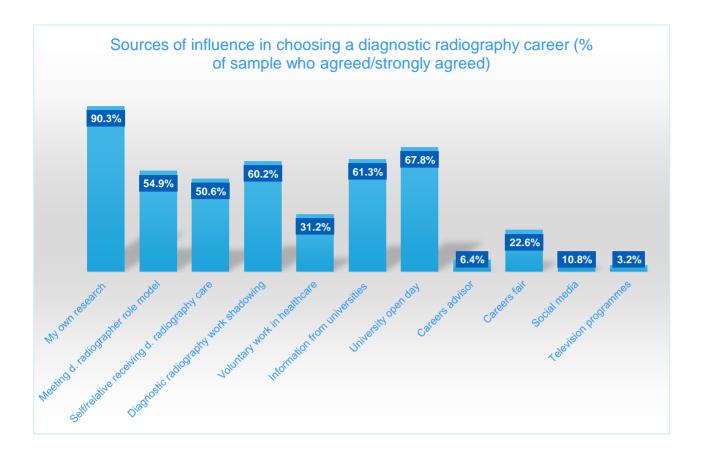
- Altruistic reasons had the highest percentages of responses, however this was closely followed by a number of professional reasons. For example 'good job availability' (92.5%), 'job security' (92.4%) and 'good opportunities for career advancement' (92.4%) were seen as only slightly less important motivations than aspects such as a career that was 'fulfilling and satisfying' (95.7%).
- Aspects of the job such as it being 'challenging/demanding' (85%), 'working in a team'
 (92.5%) and 'exciting and working under pressure' (84.9%) were all recognised as
 important motivations and beyond altruistic and professional motivations. These aspects
 should also be promoted.
- Additionally, variation in aspects of the profession were identified as important
 motivations for participants. This included a profession that 'offers variety and is more
 than just routine' (95.7%), 'working with a range of patient/service users' (96.8%) and the
 'opportunity to practise in different work environments' (77.4%).
- Participants were asked about the influence of the opportunity to work in the public and private sector. The public sector scored noticeably higher: 66.6% to 31.2%. It was interesting that the motivation to work in the NHS was much higher (90.3%) than the motivation to work in the public sector more generally (66.6%). Data collection took place during the Covid-19 pandemic response and therefore there is a possibility that the

- motivation for working for the NHS specifically scored higher owing to the heightened positivity about the NHS during this time.
- Nearly 80% of the sample saw further research/educational/teaching opportunities as a motivation for choosing diagnostic radiography. This highlights the importance of promoting these aspects of the profession.

Sources of Influence

Participants were asked about the sources that influenced their career choice.

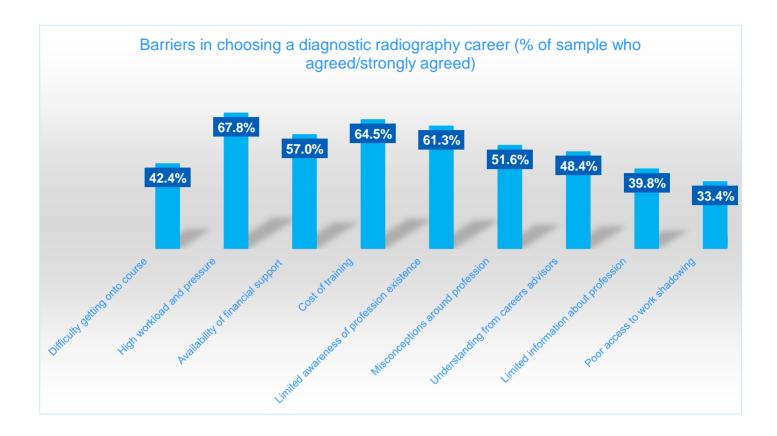
- The most influential factor was 'conducting my own research' (90.3% of the sample agreed/strongly agreed).
- Selected sources of influence are shown in the graph below on page 4.
- All personal sources scored higher than educational sources (all 16% or below). 'Career advisors' were influential for only 6.4% of the sample. This was the lowest of the personal and educational sources and was below sources such as a 'future careers programme run by school/college' (15.1%) and 'an individual in the profession visiting the school/college' (14%) which was a surprising finding.
- With the exception of 'attending a university open day' (67.8%) and 'information I got from universities' (61.3%), media and marketing sources were influential for less than 23% of the sample. 'Social media' (10.8%) in particular is a source which could be utilised more.
- Over 50% of the sample were influenced by 'My own experience of being a patient/a
 relative receiving care from the profession'. This shows the impact on patients of
 watching diagnostic radiographers perform their role. But also the opportunity for patients
 to talk to diagnostic radiographers to learn more about what they are doing.
- Whilst 31.2% had agreed/strongly agreed with 'voluntary work in healthcare settings'
 generally acting as a source of influence, this rose to over 60% who had been influenced
 by 'work shadowing experiences with the profession'.



Barriers to entering diagnostic radiography

Participants were asked how their career choice had been affected by potential barriers to entering a diagnostic radiography career. Participants recognised barriers and overcame them to choose diagnostic radiography as their career.

- The greatest barrier was the perception of a 'high workload and pressure of training' (67.8% of the sample agreed/strongly agreed with this statement).
- Most commonly identified barriers are shown in the graph below.
- Only three barriers were chosen by over 60% of the sample, but the majority of barriers were chosen by 30-60% of the sample. All barriers were recognised by a percentage of the sample.
- Financial barriers were seen as a concern by over half of the sample. This suggests that
 communication surrounding financial support available for diagnostic radiography
 students needs to be strengthened. This includes both before beginning the course and
 during it.
- Over 60% of the sample, agreed or strongly agreed with the 'limited awareness of the
 existence of the profession' as a barrier. This is a concern. Additionally, nearly 50% of
 the sample recognised a 'lack of understanding about the profession from careers
 advisors at school/college' as a barrier. This combined with over a third of the sample
 seeing 'Poor access to work shadowing experience' as a barrier highlights the challenges
 of discovering diagnostic radiography and learning about the scope of the role.



Additional findings

Half the participants responded to the question around public perception of diagnostic radiography. There was a perception that understanding of the role was limited and without knowledge of the role, it was difficult to form an opinion. This extended to a lack of understanding from other AHPs. Where there was knowledge, there was the perception that the public viewed the profession as 'button pushers' and taking x-rays which requires little skill or knowledge. The role was seen to be confused with nurses and radiologists. Personal experience with a diagnostic radiographer resulted in a positive perception.

Key findings

- Altruistic reasons were the key motivations for choosing diagnostic radiography but professional motivations were also important.
- Personal sources of influence, such as conducting research, and university information, including open days, were the most important sources of influence.
 Overall, educational, media and marketing sources scored low in terms of influence.
- A perception of a high and intense workload, a lack of awareness of diagnostic radiography and financial challenges were identified as the key barriers to choosing diagnostic radiography.

Recommendations

 42% of the sample had chosen a diagnostic radiography career during their school/college education. This is despite the findings that only 6.4% of the sample

perceived a career advisor to be a source of influence in their career choice of diagnostic radiography. Additionally, 48.4% saw a 'lack of understanding about the profession from careers advisors at school/college' as a barrier. The age range of this sample shows that students are ready to choose diagnostic radiography at school/college but **educational sources**, **such as career advisors**, **need to be utilised**; there should not be a reliance on finding out about diagnostic radiography from other sources.

- The importance of work shadowing a diagnostic radiographer was also an important finding: 60.2% saw it as a key source of influence in choosing diagnostic radiography. However, there was also a perception by 33.4% of the sample that poor access to work shadowing was a barrier to choosing the profession. It is important to note that this questionnaire was disseminated in February and March 2021 and access to work shadowing would have been affected for the previous 12 months. Nevertheless, work experience should be upscaled to help prospective students learn about the profession.
- Seeing the profession through work experience was an important source but this also takes place through 'someone in the profession I saw/met who was a really good role model for me' (54.9%) and 'my own experience of being a patient/a relative receiving care from the profession' (50.6%). Therefore, qualified diagnostic radiographers should be helped to recognise their roles as career ambassadors when meeting members of the public or patients. For example, this could be in the form of wearing 'ask me about my job' badges when working.
- Whilst it is unsurprising that 'conducting my own research' was the key source of influence (chosen by over 90% of the sample), the disparity between this source of influence and a number of media, marketing and educational sources is noteworthy. It is also important to note that 51.6% of the sample had chosen diagnostic radiography after a first career or during an 'other' stage such as during their time as a radiology assistant. Targeting media and marketing sources will help reaching this demographic, such as those looking for a career change, (in addition to the school/college demographic) and is likely to help address concerns around a lack of awareness of the profession.
- Alongside altruistic reasons, choosing a profession that was 'intellectually stimulating'
 was the key motivation for choosing diagnostic radiography. This should be a focus of
 future recruitment marketing. Whilst altruistic reasons should be a focus,
 highlighting other important professional motivations such as 'good job
 availability' would also be beneficial.
- The key barrier perceived to choosing diagnostic radiography was a perception of a 'High workload and pressure of training'. It may therefore be beneficial when marketing diagnostic radiography to emphasise a supportive environment when undertaking training.

Acknowledgements

This factsheet was produced by Dr Lucy Wallis from the University of Winchester utilising the data responses from the Motivations for choosing an Allied health Profession career questionnaire 2020. Lucy was assisted by Dr Rachel Locke, Dr Emma Hyde, Professor Beverley Harden and Carrie Biddle. For more details, please contact Rachel Locke:

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