



MALE PARTICIPATION IN NURSING AND ALLIED HEALTH HIGHER EDUCATION COURSES

Final report prepared by Research Works Limited for the Office for Students
January 2020

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Acknowledgements

Research Works Limited wish to thank all those individuals and organisations who supported this research and generously helped with their time and expertise.

We particularly wish to thank members of the Steering Group, which was set-up by the OfS to provide guidance and support the research logistically. The group members were actively involved in supporting the project and included: Ed Hughes, (OfS), Helene Fouquet (OfS), Adam Finlayson (OfS), Joshua Niderost (Council of Deans of Health), Prof. Nigel Harrison (UCLAN, Council of Deans of Health), Darren Aldrich (Health Education England), Lynne Rowley (British Association of Prosthetists and Orthotists), James Coughtrey (College of Podiatry), Claudia Gold, (SIHED programme manager), Rupert MacLaren (Diagnostic radiography student, University of Exeter, Council of Deans of Health Student Leadership Programme), and John Gladwell (Paramedic student, Oxford Brookes University, Council of Deans of Health Student Leadership Programme). Their time, expertise and effort are much appreciated.

We also wish to thank all those organisations which helped us with the recruitment of research participants and made this study possible through their assistance. Especially, we wish to thank the staff of: the University of the West of England; City of Bristol College; Sheffield Hallam University; the University of Bedfordshire; the University of Hertfordshire; North Hertfordshire College; the University of Liverpool; the University of Central Lancashire; NTW Academy; the Royal College of Speech and Language Therapists; the College of Podiatry; the College of Paramedics; the Council of Deans; Health Education England; NHS Employers and all the NHS trusts which promoted the research with their health support workers.

Finally, we wish to thank all the respondents who took part in this research and shared their experience and views with us.

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List of abbreviations

ASSIA – Applied Social Sciences Index and Abstracts

BME – Black and minority ethnic

CINAHL (EBSCO) – Cumulative Index of Nursing and Allied Health Literature

ECU – Equality Challenge Unit

ERIC – Education Resources Information Center

GAP – Gender Action Plan

HEE – Health Education England

HESA – Higher Education Statistics Agency

MEDLINE – Medical Literature Analysis and Retrieval System Online

NCOP - The National Collaboration Outreach Programmes

OfS – The Office for Students

POLAR – The participation of local areas

PSHE – Personal, social and health education

RCN – Royal College of Nursing

SFC – Scottish Funding Council

STEM – Science, technology, engineering and mathematics

Executive Summary

Background

Nursing and allied health professions are typically dominated by women in the UK and elsewhere, although the extent to which this is the case varies by different disciplines. For example, 90% of nursing students in England are female, but the figure is slightly lower for particular areas of nursing such as mental health nursing where men make up more than 20%. There has been a growing recognition of the importance of reversing these trends and reducing the gender gap in these subjects and careers. The drivers behind this are diverse as increasing male participation in nursing and allied health could bring a number of benefits: helping to grow the pool of home graduates in these subjects; ensuring both men and women have the same opportunities to pursue these careers; ensuring the workforce reflects the population it serves better; and helping to reduce the current skills shortage in these fields.

This research was commissioned by the Office for Students (OfS) to provide an evidence-based strategic direction as well as practical recommendations to raise awareness of the study and career opportunities that nursing and allied health offer men for higher education providers, health sector bodies and policy makers.

Methodology

The overall research objectives of this project were to understand better the barriers to male participation in nursing and allied health professions and provide strategic direction and practical advice for communications, policy and practice for how male participation could be increased.

The research involved quantitative data analysis of male student participation and a literature review of existing evidence, followed by primary qualitative research with a range of relevant audiences. Each element comprised the following:

- The quantitative data analysis examined male participation in nursing and allied health subjects based on the Higher Education Statistics Agency (HESA) data for 2016-2017 and 2017-2018 across a number of criteria: comparison to other broad subject groups; comparison between different nursing and allied health subjects; male participation in nursing and allied health subjects by age, level of study, ethnicity, participation of local areas (POLAR)¹, region and higher education provider.
- The literature review synthesized existing research on two key areas: barriers to male participation in nursing and allied health; and initiatives to reduce the gender gap in subjects and professions where student and workforce populations are skewed towards one gender.
- The qualitative research involved depth interviews and group discussions with a range of audiences, including: GCSE, A-level and BTEC students; current students of healthcare foundation courses and university nursing and allied health courses; influencers such as parents, teachers and career advisors; university and college admissions and outreach staff; and stakeholders from nursing and allied health

¹ POLAR is a measure of the participation in higher education of young students in the local area.

professional bodies and other organisations concerned with health education. Overall, the qualitative research involved 38 depth interviews and 30 group discussions with potential and current students and 41 depth interviews with influencers and stakeholders. The student and parent samples were skewed towards male students, however, a smaller proportion of female students were also included to enable the comparison with male students and ensure their views were captured.

The nursing and allied health professions within the scope of this study included:

- Adult nursing
- Children’s nursing
- Mental health nursing
- Learning disability nursing
- Physiotherapy
- Paramedic science
- Occupational therapy
- Diagnostic radiography
- Therapeutic radiography
- Operating department practice
- Dietetics
- Speech and language therapy
- Podiatry
- Orthoptics
- Prosthetics and orthotics

The majority of the subjects above were included in the 2017 funding reforms to nursing, midwifery and allied health. The exception to this was paramedic science which was not part of the funding reforms. However, paramedic science presented a useful point of comparison as an allied health subject with higher male participation and was included for this reason. In addition, midwifery was part of the 2017 funding reforms, but was outside the scope of this study. Further rationale for the scope of this research, in terms of the subjects that were included and excluded, is provided in the introduction (section 1.2).

Male participation in nursing and allied health higher education courses

The quantitative research provided a current snapshot of male student participation in nursing and allied health subjects. The data confirmed and demonstrated a lower proportion of male students in nursing and allied health subjects on the whole, when compared to many other subject groups except for education and training. It further showed that even within health subjects, male participation was at its lowest for nursing and allied health subjects included in the funding reforms: 13% of students studying these subjects were male compared to 40% for medical and veterinary sciences and an average of 43% across all subject groups.

However, there were still considerable variations between individual nursing and allied health subjects in scope. The subjects with the highest proportion of male students included paramedic science where 43% of students were male, orthotics and prosthetics with 40%, and physiotherapy with 39%. Subjects with the lowest male participation were children’s nursing where only 3% of students were male, speech and language therapy with 5% and adult nursing with 9%. Within nursing specifically, mental health nursing stood out in terms of a higher proportion of men (at 24%).

Data analysis further indicated that age and ethnicity were important factors affecting male student participation. Male participation increased with age across a number of nursing and allied health subjects. Specifically, men made up 9% of allied health funding reform and

nursing students aged 21 and under and 17% of those aged over 26. Male participation in allied health subjects and nursing covered by the funding reforms was also slightly higher amongst men from British ethnic minorities than white men: 17% of BME allied health and nursing students were male compared to 11% of white allied health and nursing students.

Barriers to male participation in nursing and allied health

The research confirmed there were significant barriers to male students considering nursing and allied health careers. Some of these barriers were relevant to healthcare careers more generally, as some students cited squeamishness and high responsibility for other people's lives as reasons why they would not consider working in healthcare. Other barriers were more specific to nursing and/or allied health careers. Specifically, gender stereotypes were the major factor deterring male students from considering nursing, whereas low awareness was the most significant barrier for allied health subjects and careers. In addition, negative perceptions of pay and workload in, and status of, nursing and allied health careers also posed further barriers.

Marketing considerations for increasing male participation

Respondents' views on the current marketing examples, which were shared with them during interviews, highlighted some key considerations for the content promoting nursing and allied health.

Firstly, raising awareness of the diversity and variety of opportunities in nursing and allied health often had a positive impact on perceptions of these careers. Most students and parents were genuinely struck by the wealth of opportunities as well as their own lack of awareness, making them re-consider their ideas about these careers. The core message many respondents wanted to be communicated early on was that there was more to healthcare careers than doctors and nurses, as well as more to nursing than what they thought of as 'general nursing'.

Secondly, male students were highly conscious of any gendered aspects of communications when reviewing nursing and allied health marketing and information. They were very attentive to the gender of the people shown, but sometimes also other content such as which aspects of these professions were shown, and language and tone used where these appeared as potentially gendered. Including men in images of students and professionals in nursing and allied health was seen as critical for communicating to potential male students that these professions were for them too. Many male students were also drawn to those aspects of nursing and allied health portrayed in marketing materials which they could link to their interests. These were often aligned with stereotypically masculine areas of interest such as technology and sport. In addition, potential and current male students occasionally picked up on language or tone that suggested to them certain careers were feminine, e.g. discussing only maternity in nursing recruitment materials but not paternity. Marketing and outreach materials would therefore need to be reviewed to remove any instances suggesting women were the main or only target group, as well as adapted to promote aspects of these careers attractive to both genders.

Thirdly, despite their barriers to considering nursing and allied health careers, many male students recognised these professions had appealing aspects, some of which were relevant

to their career aspirations. Making a positive difference to people's lives, variety of work, and excellent employment prospects were consistently perceived as attractive by many male students. In addition, being able to link these careers to the subjects they enjoyed at school, their other interests or perceived personal qualities further increased male students' consideration of individual nursing or allied health careers. For example, radiography appealed to those interested in physics and technology, whereas physiotherapy to those interested in sport. Similarly, professions which came across as 'hands-on', such as prosthetics and orthotics, appealed to those male students who perceived themselves as practical. Together, these different aspects of nursing and allied health suggested these careers could offer job satisfaction and employment, which prompted some to re-consider their views about these careers.

Fourthly, these attractive aspects of nursing and allied health were often not enough of a motivation when compared to other career considerations, such as pay or workload, to overcome the barriers they had. For example, when male students reviewed information about nursing and allied health careers, they often looked for information on pay and workload first. Even when they were reassured that starting pay in these careers was higher than they assumed, many still wanted to know how pay rose with career progression. In addition, male students were attentive to information that confirmed or undermined their ideas about the status of these professions. Many noticed and responded well to the information that afforded more professional status to nurses and allied health professionals in their view, e.g. information about different specialisms within nursing. Male students' reactions and interest in these aspects of nursing and allied health careers highlighted the importance of reassuring them about their concerns around pay, workload, progression and status in order to appeal to them.

Interventions to increase male participation

The research also explored what interventions and actions within education, healthcare and media may help attract more male students to nursing and allied health subjects and careers. The research identified some generic requirements that are important for attracting both male and female students, but also some more specific to male students.

School outreach was considered critical for raising awareness of nursing and allied health careers by potential students, parents and also many current students. There was a lot of appetite for more and better career advice among students in general, including for more promotion of healthcare careers which some felt were less promoted than other careers. Critically, most students wanted to be introduced to a wider range of career possibilities based on their subjects, interests and perceived qualities. Many male students were open to learning about nursing and allied health careers if they were shown how these linked to subjects they liked.

Being exposed to different careers through personal or others' experience was also very important to most potential students. Many wished they had more opportunities to choose work experience than they did and find out this way if they were suited to a career or not. External visits from professionals or students from different fields were seen as the next best thing, a proxy experience that could help them decide. In addition, there was a strong preference for interactive career outreach formats, as this would also allow them to try out certain tasks and get experience. Mentoring was sometimes suggested as another way for

students to learn from older students about particular subject or work experience – also, particularly important as a way to provide male students with role models. While these different ways to provide career information and advice were often relevant to both genders, they were particularly significant for attracting male students as they lacked exposure to health careers in other ways, e.g. through male role models elsewhere.

Discussions of university marketing and recruitment processes highlighted some considerations that may be important for attracting more male students. Specifically, students who were still undecided about which university subjects to choose, felt university open days could do more to help them expand their knowledge of courses relevant to their A-level or BTEC subjects. Currently, students reported that such events were often limited to one particular subject, narrowing students' choices to the ones they already knew about. In addition, students' experiences of these events sometimes influenced their views on the gender make-up of the workforce, which could deter some male students from pursuing female-dominated courses. For example, a male student who attended an open day where he was one of four male students in a group of female students, felt uncomfortable about being in a minority which reduced his interest in that subject. These considerations suggested it may be important for universities to explore possible solutions to overcome male students feeling being out of place in a female-dominated environment. For example, scheduling interviews so men are not in a small minority or potentially organising open days for more than one subject including those with higher proportion of men.

Admissions staff interviewed for this research were broadly committed to increasing male participation in healthcare careers. However, their universities did not have any specific targets for male students in nursing and allied health that would give structure and drive these ambitions. Admissions tutors typically commented their marketing sought to include images of both genders or encourage male students and professionals to be involved in outreach and marketing events. But these efforts were often ad hoc rather than a part of a broader strategy for increasing male participation in healthcare courses. To remedy this situation, some of the stakeholders suggested universities could be encouraged to treat this issue as part of their widening participation plans and/or gender equality commitments. For example, they could treat it as part of their targets for widening participation or meeting criteria for Athena SWAN awards, which celebrate good practices in higher education.

Many respondents from across the sample further emphasised the role of health employers in increasing male participation in a number of ways. Firstly, students, parents, teachers and career advisors often wanted health employers to be more proactive in promoting these careers both through school outreach and by offering more opportunities for workplace experience. Secondly, the employers' role was discussed in relation to healthcare support workers. Male respondents working in these roles were keen to progress towards graduate level nursing and allied health roles but needed apprenticeships, or other work-based routes, in order to do that, also recognising the support of their employers was critical. Thirdly, given the importance of personal experience and male role models for raising male students' interest in these careers, there were also suggestions that nursing and allied health subjects and careers should be promoted in hospitals, as well as through word of mouth by those working in these professions. In a slightly different way, the research also highlighted the need to work in partnership with other employers from male-dominated

professions where career-switching was common, such as the army and the fire brigade, to promote nursing and allied health careers to potential male students from that group.

Respondents rarely explicitly raised any policy aspects of male participation in nursing and allied health, except with regards to financial barriers to considering nursing and allied health. The research showed significant barriers associated with students' and parents' perceptions of low pay and high workload in nursing and allied health careers, suggesting these barriers would be critical to address in order to attract more male students. In addition, mature male students faced additional financial barriers as many felt they would not be able to take up nursing and allied health study without either financial support or routes that allowed them to both study and work.

Finally, broader media representations of nursing and allied health professions were perceived as an important element of any strategy to increase male participation in nursing and allied health. Potential and current students and parents often, therefore, suggested using television programmes and online media to raise awareness of these professions and change stereotypical perceptions. Such suggestions involved ideas for introducing nursing and allied health careers as part of existing or new medical TV dramas, reality TV programmes about healthcare, news stories or children's programmes about doctors. Increased visibility of male professionals working in these careers across these different media formats was further seen as critical in signalling to potential male students that these careers were for them too. In addition, male students suggested two-step online communications – reaching them with adverts or videos on social media or university-related websites, which may then prompt them to access more in-depth content on dedicated websites or YouTube.

Summary recommendations

All those involved in marketing of nursing and allied health subjects and careers, including:

Universities and colleges, professional and health sector bodies, healthcare employers, career advice providers

- 1. Ensure career information, marketing and outreach content promotes nursing and allied health careers in ways that appeal to both genders.**
- 2. Develop a coordinated media strategy to increase male student participation in nursing and allied health careers.**

Universities and colleges

- 3. Set targets and develop initiatives to increase male participation in nursing and allied health subjects.**
- 4. Use or develop mentoring programmes to provide male role models and support to potential and current male students in nursing and allied health subjects.**

5. Structure open days, taster sessions and foundation/access courses in ways that maximise opportunities to raise male students' awareness of varied nursing and allied health subjects.
6. Review the university recruitment process to ensure it is gender-sensitive.

Professional and health sector bodies

7. Promote the core messages that 'healthcare careers are about skills, not gender' and that 'there is a huge range of careers in healthcare' to children and students throughout different stages of education, starting from primary school.
8. Support schools to meet Gatsby benchmarks in providing career advice on nursing and allied health professions.
9. Ensure that outreach activities target potential mature students too, as mature men are more likely to consider nursing and allied health subjects and careers.
10. Promote allied health careers together to highlight the diversity of opportunities, as well as maximise the reach of allied health marketing.

Schools and career advice providers

11. Ensure information about nursing and allied health careers is provided to all male and female students whose subjects, interests and perceived qualities are relevant to these careers.
12. Establish partnerships with local health employers, universities and colleges to provide career advice about nursing and allied health subjects, mentorship and work-shadowing opportunities.

Healthcare employers

13. Increase opportunities for work experience and shadowing at the NHS and other healthcare employers for male and female secondary school students, as well as mature students interested in healthcare.
14. Use hospital lobbies and GP surgeries to promote the diversity of allied health and nursing careers, in gender-sensitive ways.
15. Increase opportunities for career progression into nursing and allied health careers, e.g. through apprenticeships.
16. Ensure male mentors are available in the workplace to support men who are starting their careers in nursing and allied health careers.

The Office for Students

- 17. Consider how regulation of access and participation can encourage and recognise targeted activity to address gender imbalance in courses leading to careers in nursing and allied health.**
- 18. Encourage gender-neutral promotion of nursing and allied health through those National Collaboration Outreach Programmes (NCOP) partnerships engaging with these disciplines.**
- 19. Consider other approaches to stimulating and influencing HE provider behaviour to increase male participation in nursing and allied health.**

Government

- 20. Take action to stimulate mature student entry into these professions.**
- 21. Use the NHS People Plan to drive action to attract both genders to nursing and allied health professions and increase male participation.**
- 22. Review school curriculum to raise awareness of allied health and nursing through the science curriculum.**

1. Introduction

1.1. Project context

Over the last few decades, women have entered a range of previously male-dominated professions, such as law, accounting or medicine. Nevertheless, the occupational structure in most countries, including the UK, remains highly segregated by gender, with men dominating in certain jobs and professions and women in others. Take-up of university courses and training is gendered along similar lines. Most notable examples include low participation of women in science, technology, engineering and mathematics (STEM) subjects and careers and low male participation in early years education and healthcare careers such as nursing.

As elsewhere, nursing and allied health professions in the UK are typically dominated by women, although the extent to which this is the case varies by different disciplines within these careers. More than 90% of adult nursing students in England are female, but the figure is slightly lower for particular areas of nursing such as mental health nursing where men make up 24%. Men are also under-represented in most allied health professions, although the picture there is much more variable and some professions have less of a gender gap. For example, male participation was more than 30% in subjects such as diagnostic radiography (31%), physiotherapy (39%), prosthetics and orthotics (40%) and paramedic science (43%).²

From 2017, following reforms to the funding of higher education programmes for nursing, midwifery and allied health subjects in England, new students could no longer have their fees paid by Health Education England (HEE) but could fund their studies through the standard student support system via the Students Loans Company. At the time, HEE and Department of Health recognised this may pose challenges in the short term for student recruitment. While the overall long term objective of the reform was to increase the number of home-grown graduates, there was a particular concern relating to vulnerable higher education courses in smaller and specialist allied health subjects, such as podiatry, prosthetics and orthotics, orthoptics and therapeutic radiography. In this context, there was a broad understanding that student participation rates across the subjects involved in the funding reforms, but particularly the smaller ones, would need to be monitored and interventions taken where necessary.

In this context, reducing the persistent gender gap in nursing and allied health professions could also help grow the pool of home graduates in these subjects. Increasing male participation in higher education programmes for nursing and allied health professions would also ensure both men and women had the same opportunities to pursue these careers, the workforce reflected the population it served better, and could help reduce the current skills shortage in these fields.

The OfS therefore commissioned this study to identify barriers to male participation to nursing and allied health and provide universities and colleges, health employers, sector body and government recommendations on how these could be overcome.

² Data on male participation based on HESA data for the academic years 2016-2017 and 2017-2018.

1.2. Overall research objectives and scope

This research was commissioned to help understand better the barriers to male participation in nursing and allied health professions and provide strategic direction and practical advice for communications, policy and practice aimed at increasing male participation. The research was supported by a Steering Group established by the OfS to provide advice and guidance to the research team at Research Works Limited.³

To meet these objectives, the research used a mixed methodology and a staged approach including a quantitative data analysis, a literature review and qualitative research. Specific objectives for each of these different research stages were as follows:

- **Stage 1 Quantitative data analysis** – to map out and benchmark male participation in nursing and allied health subjects against other relevant subjects (e.g. other healthcare, sciences) and in the context of different subject areas more generally;
- **Stage 2 Literature review** – to review and synthesize existing insight with regards to barriers to male participation in nursing and allied health subjects and initiatives aiming to reduce the gender gap, as well as identify any gaps that need to be addressed through further research;
- **Stage 3 Qualitative research** – to explore awareness, perceptions, behaviours and preferences of potential students with regards to study and career decision-making in general, and nursing and allied health subjects in particular. Also to identify messages, imagery, interventions, policies and practice that appeal to potential male students and can help increase male participation in nursing and allied health professions.

Specific disciplines that were within the scope of this study were as follows:

- Adult nursing
- Children's nursing
- Mental health nursing
- Learning disability nursing
- Physiotherapy
- Paramedic science
- Occupational therapy
- Diagnostic radiography
- Therapeutic radiography
- Operating department practice
- Dietetics
- Speech and language therapy
- Podiatry
- Orthoptics
- Prosthetics and orthotics

The majority of the disciplines above were included in the funding reforms to nursing, midwifery and allied health. The exception to this was paramedic science, which was not part of the funding reforms. However, the reason for including paramedic science was due to the fact that it was an allied health subject with a higher proportion of men and therefore presented a relevant point of comparison with many other allied health subjects that had lower male participation.

In addition, certain funding reform subjects were outside the scope of this research, specifically midwifery and dental hygiene and therapy. The rationale for this decision was

³ Members of the Steering Group are listed in the Acknowledgements (p. 4).

twofold. Firstly, each of these subjects belonged to a different category of healthcare and including them would have required significant additional resources beyond the scope of this project. Secondly, while recruitment to these disciplines was almost entirely female, they faced less acute recruitment pressures than many nursing and allied health subjects included in this research.

1.3. Quantitative data analysis

The aim of the quantitative data analysis was to provide a broad and detailed picture of male participation in nursing and allied health disciplines in the context of wider higher education. Specifically, the following aspects of male student participation were analysed:

- **How male participation in nursing and allied health disciplines compared against other university subjects;**
- **How individual disciplines within nursing and allied health compared to each other in terms of male participation;**
- **How male participation in nursing and allied health varied by age, level of study, ethnicity, local area (POLAR)⁴, region and higher education provider.**

The quantitative findings presented in Chapter 2 are based on OfS data analysis of HESA data for the academic years 2016-2017 and 2017-2018. The HESA data on male participation was analysed by broad subject groups (e.g. humanities, funding reform subjects) and also by the individual nursing and allied health subjects that were part of this study. More information on the methodology for how the population and nursing and allied health higher education courses were identified can be found in Appendix 3.

1.4. Literature review scope and approach

The main aims of the literature review were to synthesize existing research findings with regards to the following two topics:

- **Barriers to male participation in nursing and allied health university courses**
- **What initiatives work well to redress the gender gap in take-up of university courses.**

To meet these objectives, the review used the following inclusion/exclusion criteria for identifying and selecting relevant sources:

- **Subject matter relevant to the project:** The studies focusing on the following topics were included: men's attitudes to studying and/or working in nursing and allied health courses; men's experiences of applying to study on nursing and allied health

⁴ The participation of local areas (POLAR) classification groups areas across the UK based on the proportion of young people who participate in higher education. For more information visit: <https://www.officeforstudents.org.uk/data-and-analysis/young-participation-by-area/about-the-data/>

courses; barriers to male participation in nursing and allied health university courses; initiatives to reduce gender gap in university courses (within this, priority was given to evaluations showing what works in terms of interventions).

- **Date of research:** Only studies published after 2000 were included.
- **Research methods:** Studies using both qualitative, quantitative and mixed methods were included.
- **Geographic origin of publication:** Selected studies focused on the UK and contexts similar to the UK.

The literature review considered both purposively-selected sources (covering literature from different organisations that produce research regarding participation in nursing and allied health courses and careers) and those identified through searching specific databases.

Examples of relevant organisations whose websites were reviewed for relevant publications included:

- OfS, Health Education England, UCAS, the Royal College of Nursing, The College of Podiatry, the Society and College of Radiographers, the Royal College of Speech and Language Therapists, the Chartered Society of Physiotherapy, British and Irish Orthoptic Society, Royal College of Occupational Therapists, the British Association of Prosthetists and Orthotists, the College of Paramedics, the Association of UK Dietitians, and Advance HE.

In terms of electronic databases, the following databases were searched for relevant articles:

- MEDLINE – Medical Literature Analysis and Retrieval System Online
- CINAHL (EBSCO) – Cumulative Index of Nursing and Allied Health Literature
- ASSIA – Applied Social Sciences Index and Abstracts
- ERIC – Education Resources Information Center.

The search process proceeded in two stages:

- For all sources identified through the initial search, researchers reviewed their full titles and abstracts in order to screen out irrelevant sources and narrow down the pool of potentially relevant sources.
- As a second step, researchers reviewed full texts of potentially relevant sources to decide whether they met inclusion criteria.

Once the final list of sources to be included in the review was agreed, in-depth analysis and thematic synthesis of findings across different sources was conducted. Key findings were summarised for each source as relevant to the review based on full texts, which formed the basis for the synthesis of findings around key themes that follows.

1.5. Qualitative research methodology

The research used a mixed qualitative methodology comprising individual depth interviews and group discussions with a range of audiences, including: potential and current students;

influencers such as parents, teachers and career advisors; university and college admissions and outreach staff; and stakeholders.

Overall, the research involved 38 depth interviews and 30 group discussions with potential and current students, and 41 interviews with influencers and stakeholders. Depth interviews with potential students and most current students were held face-to-face, whereas influencer and stakeholder interviews were conducted over the phone. All interviews were 1-hour long. Group discussions with potential and current students included 4-6 respondents, most were conducted face-to-face and were 1.5 hours long. As part of their interviews and group discussions, respondents were shown a range of stimulus materials, including examples of current marketing of nursing and allied health subjects and careers, as well as examples and ideas for a range of different interventions that could help increase male participation in these careers.

The research was conducted in two stages (outlined below) to allow for an iterative research approach and to ensure emerging findings could be used to refine the discussion approach and other research materials.

- **Stage 1** of fieldwork placed more emphasis on exploring a broader audience context, particularly students' decision-making, barriers and motivations, and perceptions of nursing and allied health. It also captured respondents' views on a range of current marketing materials and gathered some early ideas for potential solutions to reduce the gender gap in these careers.
- **An interim analysis** was conducted following Stage 1 and emerging findings were used to help expand and develop the examples of potential solutions to be shared with respondents as research stimulus.
- **Stage 2** was then used to explore in greater depth students' and influencers' views on, and needs from, different marketing and outreach materials and interventions, as well as to test and refine hypotheses about decision-making, barriers, motivations, perceptions and solutions developed in Stage 1.⁵

All potential and current students were also set a pre-task which they were asked to complete ahead of their interviews.

- **In Stage 1**, students were asked to do two tasks: a) complete a 'Timeline' exercise to show key moments in their study and career decision-making and b) answer a brief questionnaire capturing their awareness and interest in health careers, including nursing and allied health.
- **In Stage 2**, students were asked to watch two videos before their interviews: The Wow Show episode about allied health careers and the 'We are the NHS' nursing advert. This helped save time in interviews and also educate students, which was critical for enabling them to give a more informed view on existing and potential marketing and outreach solutions. Educating respondents before the interview was also more appropriate in Stage 2, as capturing their spontaneous, uninfluenced responses was already conducted in Stage 1.

⁵ See Appendix 2 for the main discussion guide used within the qualitative research.

The sample structure for the student and influencer and stakeholder samples is shown below.

Table 1: Student sample

Level, type and subject of study		Female depth interviews	Male depth interviews	Female group discussions	Male group discussions
Potential students of nursing and allied health subjects	GCSE	3	10	2	6
	A level	3	10	2	6
	BTEC (level 3)	2	4	1	2
	Foundation Year	/	2	1	1
	Health support workers	/	/	1	3
Current students of nursing and allied health subjects		/	4	/	5
Total		8	30	7	23

Table 2: Influencer and stakeholder sample

Respondent type	Telephone depth interviews
Secondary schools – key influencers (teachers and career advisors)	12
Parents	16
University and college admissions and outreach staff	6
Stakeholders	9
Total	41

The student sample was skewed towards male students given their centrality to the project and only parents with sons were recruited. However, the potential student sample was also structured to include a smaller number of female students to enable a comparison by gender and ensure their views on any strategies to attract male students were captured. Stakeholder interviews were conducted with representatives of a range of health sector and professional bodies relevant to nursing and allied health professions. More detailed sample information about additional criteria for the different audiences is included in Appendix 1.

Potential students, parents, teachers and career advisors were all recruited using the Research Works network of independent recruiters. Current students, university staff and stakeholders were recruited using the contacts supplied by the Office for Students and members' of the Steering Group.

Qualitative fieldwork was completed in stages between 29th March and 10th April, 24th June and 12th July, and 29th July and 23rd August 2019. Interviews and group discussions

were held in Hertfordshire, London, Bristol area, Birmingham area, Manchester and Leeds. The project was led by Dr Danica Minic and the research team included: Gemma Haddock, Amy Smith and Oliver Gent, supported by field managers Jill Barnett and Annelize Fagan.

A note on methodology

Qualitative samples are purposive and quota-driven in nature. They are designed to achieve specific outcomes, e.g. provide an in-depth understanding of a range of experiences and views. Consequently, they have no quantitative accuracy in terms of identifying proportions of populations holding stated views.

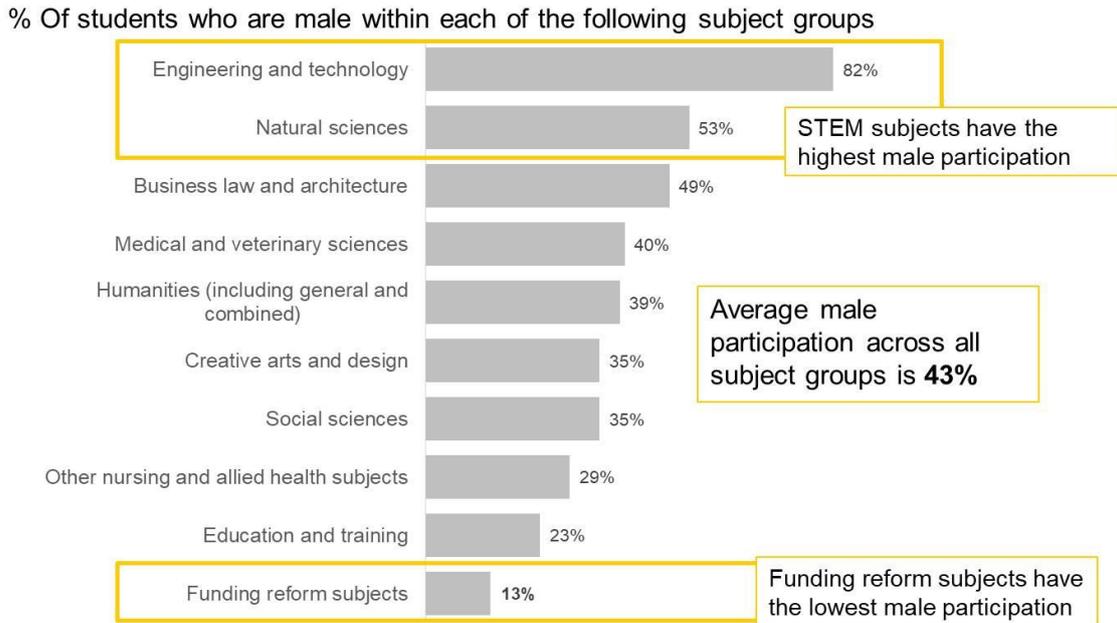
For these methodological reasons, it is not appropriate to present qualitative findings in terms of the numbers of respondents expressing certain views. The findings in this report are therefore described in qualitative terms. As a purely indicative guide terms such as ‘a few respondents’ indicate a number in the region of 1-10 respondents. Terms such as ‘some’ indicate a sizeable group of respondents, e.g. one-third, but not a majority. ‘Many’ suggests over a half of respondents and ‘most’ a significant proportion of respondents, i.e. over two-thirds.

2. Quantitative data analysis: A ‘snapshot’ of male participation

The analysis below provides a broad view of male participation in nursing and allied health higher education courses based on the HESA data for 2016-2017 and 2017-2018. It shows how male participation in these subjects compares to other health subjects, as well as other subject areas. It also details how individual subjects within nursing and allied health compare against each other. It then delves deeper to explore how male participation varies by age, level of study, ethnicity, POLAR, region and higher education provider. This analysis, however, does not look at the more long-term trends in male participation in nursing and allied health subjects due to the restrictions in the availability of such data.

2.1. Male participation across different subject areas

Data analysis showed male participation was lower in nursing and allied health subjects than in most other subject areas, except for education and training that had a similarly low participation of male students. However, while the proportion of male students was generally low in nursing and allied health subjects, it was at its lowest for those nursing and allied health subjects involved in the funding reforms. Research found 13% of students studying these subjects were male compared to an average of 43% across all subjects. The subjects with the highest proportion of male students were STEM subjects with men comprising 82% of students in engineering and technology and 53% in natural sciences. The chart below shows how different subject areas compare in terms of male student participation:



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 2,795,215. Funding reform subjects include: nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthotics, physiotherapy, speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene, and therapy.

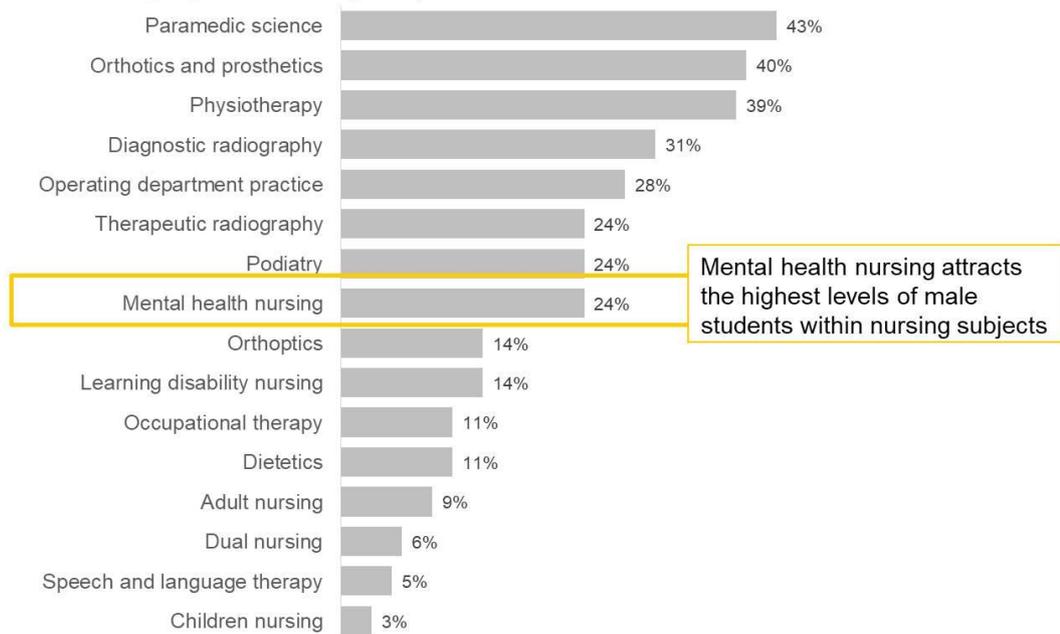
Figure 1: Male participation in different subject groups (Source: HESA)⁶

2.2. Male participation within nursing and allied health

While male participation was at its lowest in the nursing and allied health subjects covered by the funding reform, there were still considerable variations between individual subjects in this group. Subjects with the highest proportion of male students included paramedic science with 43% male students, orthotics and prosthetics with 40%, and physiotherapy with 39%. Subjects with the lowest male participation were children's nursing where only 3% of students were male, speech and language therapy with 5% and adult nursing with 9%. Within nursing specifically, mental health nursing stood out in terms of higher proportion of men at 24%. The variations between different nursing and allied health subjects in terms of male participation are shown below:

⁶ This includes undergraduate and postgraduate students, including postgraduate research students. All domiciles and modes of study are included. The same applies to all other charts and tables in this section.

% Of students studying the following subjects who are male



Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865.

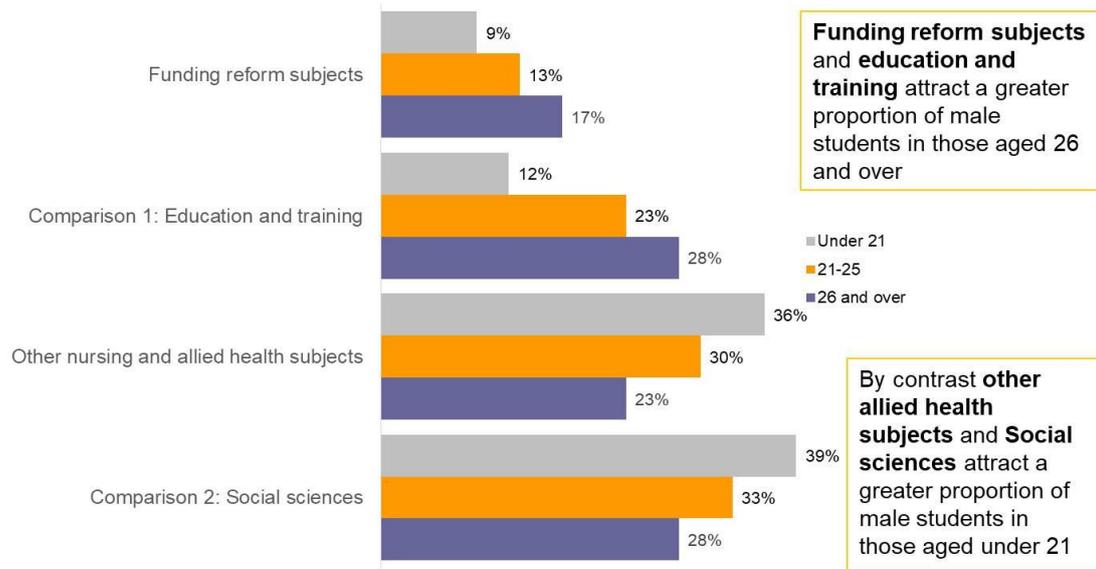
Figure 2: Male participation in individual nursing and allied health subjects (Source: HESA)⁷

2.3. Male participation in nursing and allied health by age

Across a number of allied health and nursing subjects covered by the funding reforms male participation increased with age. Men made up 9% of allied health funding reform and nursing students aged 21 and under and 17% of those aged over 26. The chart below shows how the proportion of male students studying funding reform nursing and allied health subjects compares to other subject groups by age:

⁷ Note: Dual nursing refers to courses which lead to registration in two types of nursing, e.g. adult and children’s nursing.

% Of students who are male within each of the following subject groups by age



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 2,795,215. Funding reform subjects include: nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthoptics, physiotherapy, speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene and therapy.

Figure 3: Male participation in different subject groups by age (Source: HESA)⁸

Interestingly the same trend of rising male participation with age is evident in education and training, another female-dominated subject group where 12% of 21 and under are male and 28% of over 26s. The trend is reversed when looking at other nursing and allied health subjects⁹ where the proportion of males aged 21 and under is 36% and over 26 is 23%.

Looking at individual allied health and nursing subjects, several subjects in particular have levels of male participation significantly increasing with age: learning disability nursing, mental health nursing, dual nursing, physiotherapy, diagnostic radiography, therapeutic radiography and paramedic science. Only podiatry breaks the trend, with 31% of those studying aged 21 and under being male and 20% of those 26 and over, as shown in the table below.

⁸ Note: Other subject groupings not included here had much more similar proportions of men in each age group.

⁹ Other nursing and allied health subjects group included the following subjects: community nursing; dental nursing; others in nursing; pharmacology; toxicology; pharmacy; health sciences; ophthalmics; environmental and public health; complementary and alternative medicine; medical technology; healthcare science; biomedical sciences; anatomy, physiology and pathology; others in subjects allied to medicine; sport and exercise sciences; psychology (non-specific); applied psychology; developmental psychology; psychology and health; others in psychology.

% Of students studying the following subjects who are male by age

Subject	Under 21	22-25	26 and over
Adult nursing	5%	9%	12%
Children nursing	2%	4%	5%
Learning disability nursing	5%	13%	20%
Mental health nursing	8%	17%	35%
Dual nursing	3%	11%	15%
Dietetics	6%	15%	14%
Occupational therapy	7%	12%	15%
Operating department practice	24%	30%	29%
Orthoptics	12%	**	**
Physiotherapy	33%	45%	44%
Speech and language therapy	3%	6%	6%
Podiatry	31%*	27%*	20%*
Orthotics and prosthetics	34%	**	**
Diagnostic radiography	26%	37%	35%
Therapeutic radiography	21%	24%	32%
Paramedic science	34%	45%	51%

7 subjects in particular have **levels of male participation significantly increasing with age:**

- Learning disability nursing
- Mental health nursing
- Dual nursing
- Physiotherapy
- Diagnostic radiography
- Therapeutic radiography
- Paramedic science

Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865. ** = Base sizes are too small to report on at this level; * = small overall sample size.

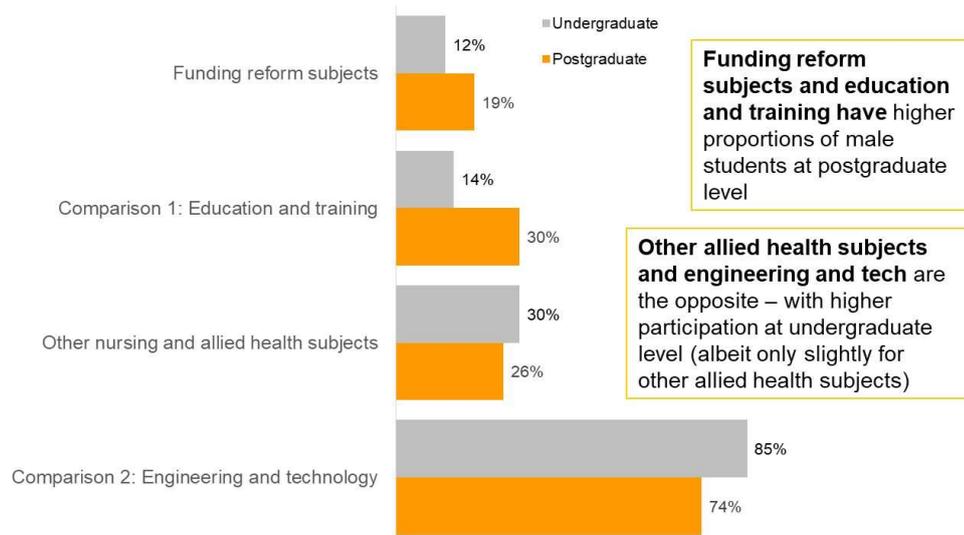
Table 3: Male participation in individual nursing and allied health subjects by age (Source: HESA)

The figures above suggest that stimulating mature students' participation would impact positively on male participation rates too. Also, as the proportion of men increases with age, any drop in mature students' participation is likely to have a negative effect on male student participation proportionately more than female participation.

2.4. Male participation in nursing and allied health by level of study

A higher proportion of postgraduate funding reform and nursing subject students were male and the same trend was seen for education and training, mirroring the increase in participation with age. Namely, 12% of undergraduate funding reform subject and nursing students were male and 19% of postgraduate students. Similarly, 14% of undergraduate education students were male and 30% of postgraduate students. The chart below shows how these two subject groups, where male participation increased with the level of study, compare to other subject groups:

% Of students who are male within each of the following subject groups by level of study



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 2,795,215. Funding reform subjects include: nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthoptics, physiotherapy, speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene and therapy.

Figure 4: Male participation in different subject groups by level of study (Source: HESA)¹⁰

When individual subjects within allied health and nursing are considered, certain subjects stand out as having a greater proportion of males amongst postgraduate students than amongst undergraduate students: adult nursing, mental health nursing and diagnostic radiography. The table below shows how different allied health and nursing subjects compare in this respect:

¹⁰ Note: Other subject groupings not included here had much more similar proportions of men at each study level.

% Of students studying the following subjects who are male by level of study

Subject	Undergraduate	Postgraduate
Adult nursing	8%	14%
Children nursing	3%	4%
Learning disability nursing	14%	**
Mental health nursing	23%	30%
Dual nursing	6%	**
Dietetics	11%	9%
Occupational therapy	11%	12%
Operating department practice	28%	**
Orthoptics	14%	**
Physiotherapy	38%	42%
Speech and language therapy	4%	5%
Podiatry	24%	**
Orthotics and prosthetics	40%	**
Diagnostic radiography	30%	37%
Therapeutic radiography	24%	25%
Paramedic science	43%	**

Three subjects have a **greater proportion of males amongst postgraduate students** than amongst undergraduate students:

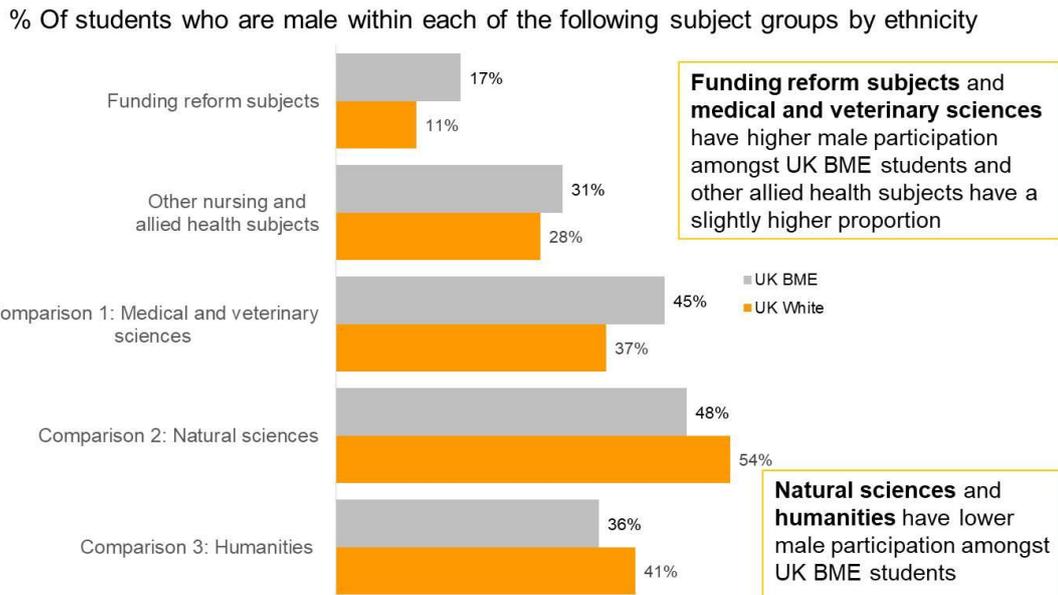
- Adult nursing
- Mental health nursing
- Diagnostic radiography

Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865. ** = Base sizes are too small to report on at this level; * = small overall sample size.

Table 4: Male participation in individual nursing and allied health subjects by level of study (Source: HESA)

2.5. Male participation in nursing and allied health by ethnicity

Data suggested some broad patterns around how participation in different subject areas varied by ethnicity of male students. There was a higher proportion of men from black and ethnic minority students (BME) studying medical and veterinary sciences and other nursing and allied health subjects than white men studying those subjects. Male participation in allied health subjects and nursing covered by the funding reforms was also slightly higher amongst BME men than white men: 17% of BME allied health and nursing students were male compared to 11% of white allied health and nursing students. Conversely, white men were more likely to study subjects within humanities and natural sciences than BME male students. Variation by ethnicity and subject groups is shown in the chart below:



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 2,795,215. Funding reform subjects include: nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthotics, physiotherapy, speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene and therapy.

Figure 5: Male participation in different subject groups by ethnicity (Source: HESA) ¹¹

Looking at individual allied health and nursing subjects, particular subjects stood out in terms of higher proportion of BME men than white men (when compared to female BME and white students). Most notably, BME men make up a greater proportion of mental health nursing students than their white counterparts: 36% of BME mental health nursing students were men compared with 17% of white students.

Other subjects with higher male participation amongst BME men than white males included: physiotherapy, diagnostic radiography, operating department practice and diagnostic radiography. The table below shows variation in male participation by ethnicity across different allied health and nursing funding reform subjects:

¹¹ Note: Other subject groupings not included here had much more similar proportions of men by ethnicity.

% Of students studying the following subjects who are male by ethnicity

Subject	UK White	UK BME
Adult nursing	8%	11%
Children nursing	3%	2%
Learning disability nursing	13%	16%
Mental health nursing	17%	36%
Dual nursing	6%	5%
Dietetics	11%	10%
Occupational therapy	11%	13%
Operating department practice	25%	34%
Orthoptics	13%	15%
Physiotherapy	37%	47%
Speech and language therapy	5%	2%
Podiatry	19%*	35%*
Orthotics and prosthetics	42%	**
Diagnostic radiography	28%	34%
Therapeutic radiography	24%	24%
Paramedic science	42%	47%

Four subjects in particular have **higher levels of male participation amongst BME students** than they do amongst white students:

- Mental health nursing
- Operating department practice
- Physiotherapy
- Diagnostic radiography

Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865. ** = Base sizes are too small to report on at this level; * = small overall sample size.

Table 5: Male participation in individual nursing and allied health subjects by ethnicity (Source: HESA)

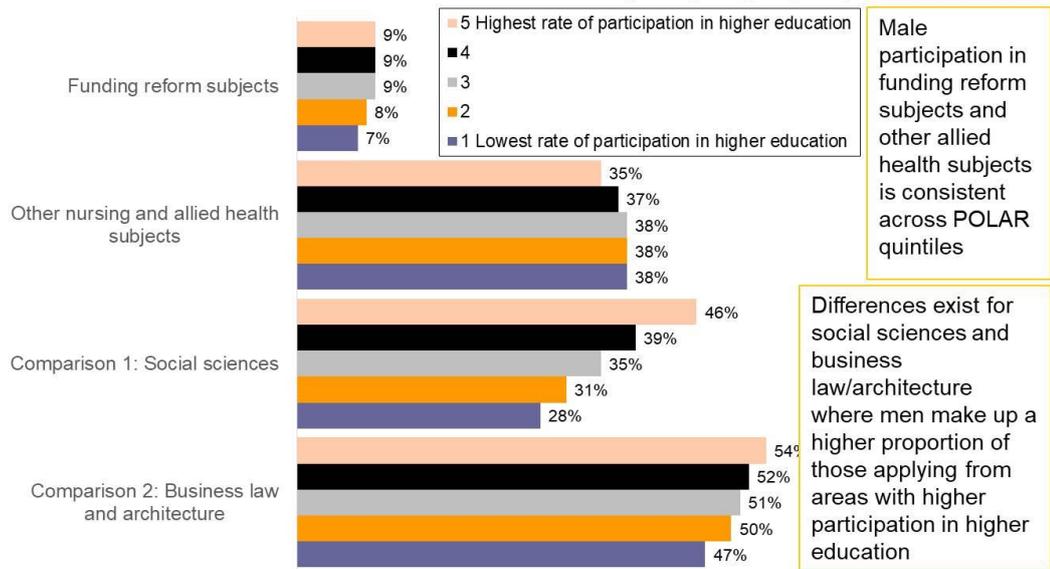
The findings above suggest that widening participation initiatives aiming to increase participation from BME student groups in nursing and allied health subjects may also have a positive impact on increasing male student participation generally. Both will be critical for meeting the objectives set out in the NHS People Plan to ensure the healthcare workforce was diverse and reflected the patients they served.

2.6. Male participation in nursing and allied health by POLAR¹²

The proportion of male vs female students was fairly consistent across the POLAR quintiles for allied health and funding reform subjects and nursing. This was in contrast with some other subject areas, such as business, law, architecture and social sciences, which attracted a higher proportion of males from the areas with greater participation in higher education than they did from the areas with lower participation, as shown in the chart below:

¹² As previously referenced, POLAR is a measure of the participation in higher education of young students in the local area. Quintile 1 areas are places where fewer young people go to higher education. Young students from outside the UK are included in the No quintile group.

% Of students who are male within each of the following subject groups by POLAR



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 2,795,215. Funding reform subjects include: nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthoptics, physiotherapy, speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene and therapy.

Figure 6: Male participation in different subject groups by POLAR (Source: HESA)¹³

There were further no significant patterns in terms of male participation by POLAR across the funding reform subjects or for paramedic science, as no significant differences were identified based on the data below:

¹³ Note: Other subject groups not listed here had very similar % of men in each POLAR quintile.

% Of students studying the following subjects who are male by POLAR quintile

Subject	1	2	3	4	5	
Adult nursing		5%	5%	5%	5%	5%
Children nursing		2%	2%	2%	1%	2%
Learning disability nursing		5%	7%	0%	4%	7%
Mental health nursing		6%	6%	7%	9%	10%
Dual nursing		0%	0%	5%	0%	3%
Dietetics		**	13%	5%	8%	3%
Occupational therapy		5%	7%	7%	7%	4%
Operating department practice		28%	20%	26%	18%	27%
Orthoptics		**	**	6%	**	21%
Physiotherapy		35%	32%	33%	33%	31%
Speech and language therapy		5%	3%	5%	1%	1%
Podiatry		**	**	31%	32%	33%
Orthotics and prosthetics		**	**	**	**	**
Diagnostic radiography		25%	30%	29%	26%	23%
Therapeutic radiography		26%	24%	21%	18%	20%
Paramedic science		31%	37%	34%	37%	30%

No significant patterns of male participation by POLAR exist across the funding reform subjects or for paramedic science

Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865. ** = Base sizes are too small to report on at this level; * = small overall sample size.

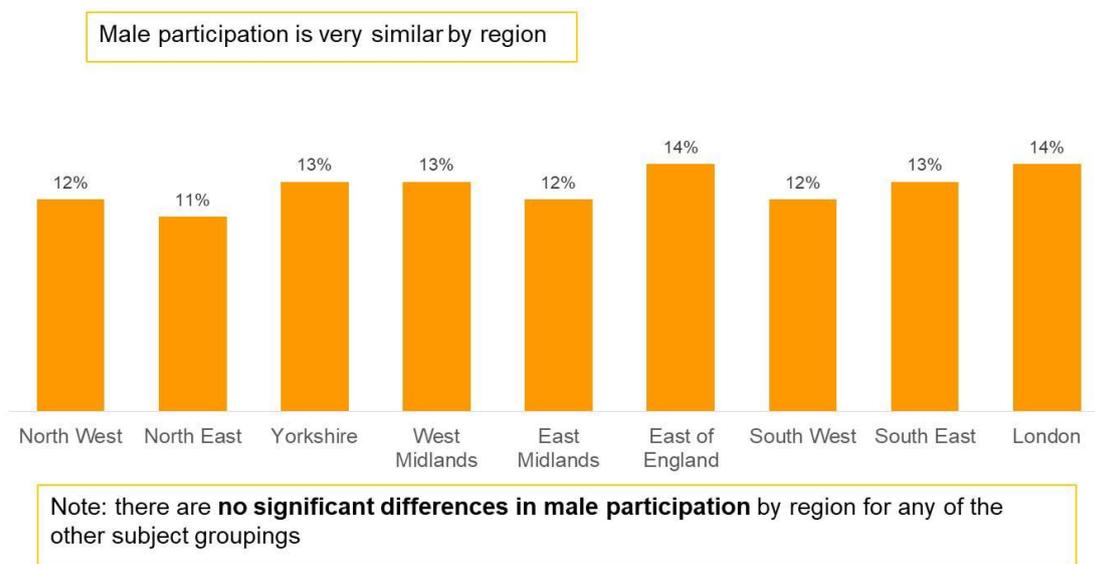
Table 6: Male participation in individual nursing and allied health subjects by POLAR (Source: HESA)

Since the proportion of men is consistent across different POLAR quintiles, increasing male participation is unlikely to affect student participation in terms of POLAR either positively or negatively.

2.7. Male participation in nursing and allied health by region

The proportion of male students in nursing and allied health subjects covered by the funding reforms was fairly consistent across regions, as shown in the chart below:

% Of Funding reform subject students who are male in each of the following regions



Base: Based on students who were on a higher education course in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 117,890. Funding reform subjects include: Nursing (adult nursing, children nursing, learning disability nursing, mental health nursing, dual nursing), midwifery, dietetics, occupational therapy, operating department practice, orthoptics, physiotherapy, Speech and language therapy, podiatry, orthotics and prosthetics, diagnostic radiography, therapeutic radiography, dental hygiene and therapy.

Figure 7: Male participation in nursing and allied health funding reform subjects by region (Source: HESA)¹⁴

Looking at the individual allied health and nursing subjects, there were only a few instances where male participation in particular subjects varied significantly by region. Specifically, the proportion of mental health nursing students who were male was higher in the South East, London and the East of England and very low in the North East and Yorkshire. There was further: a lower proportion of physiotherapy students in the North East who were male; a higher proportion of diagnostic radiography students in the East Midlands who were male; and a higher proportion of paramedic science students in London and the West Midlands who were male whereas a lower proportion in the South East. All significant differences in male participation by region are highlighted in the table below:

¹⁴ Note: Students from the Open University are counted in their home region, and those from Scotland, Wales or Northern Ireland are not in this figure.

% Of students studying the following subjects who are male by region

Subject	North West	North East	Yorkshire	West Midlands	East Midlands	East of England	South West	South East	London	Overall male participation by subject
Adult nursing	8%	7%	8%	9%	8%	9%	8%	9%	10%	9%
Children nursing	2%	4%	3%	3%	5%	2%	3%	4%	3%	3%
Learning disability nursing	13%	15%	12%	14%	15%	13%	13%	**	17%	14%
Mental health nursing	21%	13%	18%	23%	23%	31%	20%	29%	32%	24%
Dual nursing	**	**	**	5%	**	**	**	**	10%	**
Dietetics	9%	**	11%	13%	12%	15%	17%	4%	10%	11%
Occupational therapy	11%	10%	10%	12%	13%	10%	11%	11%	15%	11%
Operating department practice	22%	20%	25%	32%	21%	33%	33%	33%	32%	28%
Orthoptics	13%	**	16%	**	**	**	**	**	**	**
Physiotherapy	40%	32%	41%	37%	43%	37%	36%	40%	39%	39%
Speech and language therapy	5%	4%	5%	3%	6%	7%	6%	4%	4%	5%
Podiatry	22%*	**	26%*	**	22%*	**	32%*	28%*	19%*	24%
Orthotics and prosthetics	40%	**	**	**	**	**	**	**	**	**
Diagnostic radiography	27%	29%	30%	35%	37%	34%	31%	27%	28%	31%
Therapeutic radiography	23%	**	21%	26%	**	26%	26%	19%	24%	24%
Paramedic science	47%	46%	45%	54%	**	39%	42%	36%	48%	

Base: Based on students who were on a higher education course in subjects within the scope of this study in either 2016-17 or 2017-18 at an English higher education institution in receipt of public funding. N = 110,865. ** = Base sizes are too small to report on at this level; * = small overall sample size.

Table 7: Male participation in individual nursing and allied health subjects by region (Source: HESA).

Note: Any cell highlighted in red indicates the figure is 5% or more lower than the average male participation for that subject. Any cell highlighted in green indicates the figure is 5% or more higher than the average male participation for that subject.

3. Literature review: Barriers and solutions to increasing male participation

3.1. Barriers to male participation in nursing and allied health

3.1.1. Perceptions of work and professional attributes as gendered

There was a widespread agreement that the biggest barrier to male participation in nursing and some allied health subjects and careers was the societal perception of the gendered nature of work in these fields (Carnevale, T and Priode, K, 2018; Dean, E, 2018; Gheller, B and Lordly, D, 2015; Greenwood, N, Wright, JA and Bithell, C, 2006; Litosseliti, L and Leadbeater, C, 2013; Lordly, D, 2012; Whitford, H, et al, 2018). Nursing, in particular, tends to be perceived as ‘women’s work’ and something men do not do. Cultural, historical and linguistic factors combine to result in entrenched perceptions of nursing careers as firmly linked to feminine attributes, skills and interests.

At the heart of this perception are gender stereotypes about caring work as something naturally associated with women. There is a widespread belief that women possess certain innate attributes and skills that make them better at caring work. This idea of feminine skills

extends to other areas of work involved in these fields too. For example, the perception that girls excel at communication skills underpins attitudes to speech and language therapy as a field better-suited to women than men (Litosseliti, L and Leadbeater, C, 2013). Similarly, dietetics can be perceived as related to home economics, food, recipes and the work of nurturing, which is, again, perceived in terms of feminine work, skills and interests (Gheller, B and Lordly, D, 2015). However, it was less clear whether similar perceptions of gendered work were relevant to other allied health professions, as the issue of male participation was much more extensively explored with regards to nursing than allied health. This gap in the literature was therefore addressed through further qualitative research as part of this study.

The gender stereotypes about feminine skills are reinforced by the knowledge about, and experience of, nursing careers as historically and currently female-dominated. The female profile of the workforce in nursing is sometimes reflected in the language and imagery used within these professions that positions men as an aberration. Several authors have highlighted the use of the term 'male nurse' which positions men in nursing as outside of the norm, similarly as the term 'lady doctor' does with women (Carnevale, T and Priode, K, 2018; Dean, E, 2018; Whitford, H, et al, 2018). Other terms, such as 'matron' or 'ward sister', the use of the pronoun 'she' in course or exam materials, or the dominance of women in visual representations of these careers further corroborate the experience of these fields as female-dominated. Lack of male role models also means this perception of the field often remains unchallenged.

More broadly, the stereotypical view of caring work as female may also be reinforced through individuals' experience of women as primary carers in early years childcare and education (Peeters, J, 2007), as well as within the family. Children as young as primary school age perceive professions through gender stereotypes, for example, seeing the role of nurse as female and the one of doctor as male. Already at this early age, the gendered ideas about work influence girls' and boys' interests in potential future careers. A study of primary school children's attitudes to careers found that girls were ten times more likely to want to be a nurse and three times more likely to want to be a teacher than boys (Kids Connections, 2018a).

Gender stereotypes coupled with the experience of a female-dominated workforce in these fields combine to pose barriers to male consideration of nursing and potentially some allied health careers too. Where male students do show interest in these careers, they may not be supported by their key influencers who may object to their choice of 'women's work'. Studies with men studying or working in nursing found some experienced negative peer pressure and lack of parental support for their choice (Whitford, H, et al, 2018). Another study found that only 2/5 of parents in UK would want their sons to go into nursing (Matthews, E, 2019). Male students and professionals in these fields may also find themselves in situations where their hetero-masculinity is questioned and threatened. They may be exposed to gender-stereotypical or homophobic remarks, for example, a stereotype view found in a study with secondary school students was that 'all dieticians are gay' (Lordly, D, 2012). In this context, male students sometimes commented men took longer to make a decision to go into nursing because they needed to overcome the stereotypical view of these professions as female. Being able to do this was perceived to require maturity and resilience that came with age and experience (Harding, T, et al, 2018; Marketwise Strategies Limited, 2019).

Such perceptions of nursing and allied health work influence not only the likelihood of men going into these careers, but also choices within these fields. Studies have noted that when men do choose these careers, they tend to favour those perceived as more technical or specialised, already with a higher proportion of men, or more linked to areas perceived as masculine (Whitford, H, et al, 2018). Subjects such as mental health nursing, physiotherapy, paramedic science, prosthetics and orthotics and diagnostic radiography are those that have tended to attract more men than other nursing and allied health subjects. The reasons why certain nursing and allied health subjects attract more men were further explored in the qualitative research phase of this study.

3.1.2. Lack of awareness and exposure

Studies with primary school, secondary school and university students found generally limited awareness of careers and opportunities in healthcare, beyond a few more well-known professions such as nurse, doctor or midwife (Greenwood, N and Bithell, C, 2015; Greenwood, N, Wright, JA, and Bithell, C, 2006; Kids Connections 2018a, Whitford, H, et al, 2018). However, even with nursing, any awareness was limited to a very basic understanding and there was little knowledge about the varied opportunities within nursing or what the actual role of a nurse involved. Smaller and specialist allied health professions, for example orthoptics, orthotics, therapeutic radiography or podiatry, particularly suffered from low awareness and lack of understanding about what their work involved (Define Research & Insight, 2017).

The generally low awareness of careers in nursing and allied health careers was further exacerbated by gender stereotypes discussed above, which sometimes meant male students had even less awareness of these careers than female students (Greenwood, N and Bithell, C, 2015; Greenwood, N, Wright, JA, and Bithell, C, 2006). Men studying or working in these fields often reported lack of career advice and information about these careers, suggesting they were seldom promoted to male students by teachers and career advisors (Boyd, S and Hewlett, N, 2001; Whitford, H, et al 2018).

In the absence of more structured and systematic promotion of nursing and allied health careers to male students, men typically chose nursing or allied health professions because they were exposed to them through random events such as personal or family member's experience of care, through working in fields where they came across them, or from someone close working in those careers (Litosseliti, L and Leadbeater, C, 2013; Whitford, H, et al 2018). Exposure to these professionals, their work and the difference it made to people's lives was often cited as something that triggered consideration of working in those fields. It is therefore not surprising that different forms of exposure are frequently considered as strategies that can help override stereotypical views of these careers and raise awareness, interest and confidence in pursuing them. Different ways to achieve such exposure are discussed in Section 3.2.

3.1.3. Treatment refusal concern

Particular areas of nursing or allied health work that involved 'intimate care' or work with children were sometimes perceived as particularly challenging for men due to potential treatment refusal or anxiety over being sued for inappropriate behaviour (Carnevale, T and Priode, K, 2018). These perceptions acted as barriers to male nurses or allied health professionals considering particular fields of nursing or allied health.

The recent Scottish study of male participation in nursing (Whitford, H, et al 2018) found that obstetrics, gynaecology, and paediatrics raised most issues for male nurses involved in this research. Men were concerned about potentially higher rate of treatment refusal they may experience from female patients as male nurses in obstetrics and gynaecology. Some were further anxious that female patients could feel uncomfortable or accuse them of inappropriateness when providing intimate care.

Similar concerns were reported in an Australian study of barriers to specialising in mammography (Warren-Forward, HM, 2018). Nearly twice as many female students (84%) than male (43%) answered they would be interested in mammography training. Additionally, almost five times more male students agreed they would feel uncomfortable performing mammography than females. Reasons cited by men included a fear of being sued for sexual harassment or because they were male.

Concerns over being viewed with suspicion when working with children were raised by male nurses and speech and language therapists (Boyd, S and Hewlett, N, 2001). For example, some male speech and language therapists reported being told to practise with a clinic room door open. These concerns mirror challenges experienced by men in early years childcare and education (Davies, J, 2017).

3.1.4. Feeling in a minority

There is a body of literature about men's experiences as students or professionals in female-dominated subjects and careers suggesting some men may find this uncomfortable (Beagan, BL and Fredericks, E, 2018; Boyd, S and Hewlett, N, 2001; Whitford, H, et al, 2018). Negative experiences resulting from being a minority gender range from: feeling isolated in a predominantly female workplace or classroom culture (e.g. difficulty making friends); being treated as 'muscle power' (so having their hetero-masculinity reinforced); or feeling conspicuous as the only man (e.g. difficult to miss lectures unnoticed). These experiences mirror women's experiences in careers where they are a minority gender, for example engineering or politics, with women also reporting feeling isolated in a masculine culture and social networks.

While these experiences present challenges for retention of male students and professionals rather than recruitment, men may also be inclined to consider these issues when choosing subjects and careers. Research with school children and young people about their career interests showed boys were more likely to select careers traditionally dominated by men (Kids Connections, 2018a). There are some indications boys interested in

female-dominated careers may be deterred from considering them because there are few men in them. For example, a speech and language therapist reported being told by a career advisor that this was a predominantly female career and ‘men did not go anywhere’ in it (Boyd, S and Hewlett, N, 2001).

3.1.5. Pay and status

Perceptions that some of these careers may have low earning potential – for example, nursing, dietetics, speech and language therapy – was recognised as a factor deterring potential candidates in general (Litosseliti, L and Leadbeater, C, 2013; Lordly, D, 2012). However, such perceptions may have more impact on potential male candidates traditionally expected to be ‘breadwinners’. Academic staff interviewed for the Scottish study on male participation in nursing also noted this may be exacerbated by negative media coverage of the NHS which was presented in continuous crisis and poorly funded (Whitford, H, et al, 2018).

Other research has highlighted the importance of ‘high status’ jobs for some men, which raises questions about the impact of an internal hierarchy of roles and specialities within healthcare on recruitment to nursing and allied health higher education courses. For example, a study of secondary school students’ attitudes to dietetics (Lordly, D, 2012) found that 22% of respondents thought that men did not consider dietetics because it had a lower placement within a healthcare hierarchy and an inferior professional profile” (p. 113).¹⁵ Some male students involved in the study were further quoted saying that “a lot of men don’t want to be pictured as being somewhat like a nurse”, “more males with an interest in science and health would look to become doctors” and “males think dietitians are not as important as doctors” (p.113).

The findings on key barriers were further tested and confirmed through our qualitative research, as well as refined and expanded where appropriate, e.g. with regards to allied health professions. The qualitative research also explored these issues with a wider range of relevant audiences than those included in the studies cited above, including potential and current male students, parents, teachers, career advisors, university outreach and admissions staff and stakeholders.

3.2. Initiatives to reduce the gender gap in student participation

3.2.1. Marketing considerations

Marketing strategies for recruiting men into nursing and allied health courses and careers were often discussed as central to initiatives aiming to increase male participation in these

¹⁵ By comparison, 47.1% of respondents thought that gender stereotypes were a reason why men considered dietetics less often.

fields. Part of the reason for this was that cultural perceptions of these professions and the work involved in them as female were identified as the main barrier to male participation. Men interested in nursing and allied health professions needed to overcome stereotypes of these fields as female to pursue these careers. In this context, marketing was discussed in terms of promoting alternative cultural representations of these careers and work with greater potential to attract more men.

Two key aspects of such alternative cultural representations were consistently highlighted. Firstly, many authors suggested gender needed to be 'taken out' of nursing and allied health careers. In other words, these careers needed to be 're-branded' and represented in gender-neutral terms (Whitford, H, et al, 2018). Secondly, recommendations also stressed the need to promote those aspects of nursing and allied health careers that were likely to be attractive to men (based on research into male motivations when choosing subjects and careers) (Carnevale, T and Priode, K, 2018; Greenwood, N, Wright, JA and Bithell, C, 2006; Litosseliti, L and Leadbeater, C, 2013; Whitford, H, et al, 2018). Rather than taking 'gender' completely out of representations of nursing and allied health, they were perceived to be in need of becoming gendered in a different way to include more visible links to masculinity too. The qualitative research explored the potential of such strategies to appeal to male students, but also whether they carried any risk of alienating potential female students.

Specific recommendations for marketing nursing and allied health careers in gender-neutral terms often focused on linguistic and visual aspects of how these careers were represented (Carnevale, T and Priode, K, 2018; Whitford, H, et al, 2018). These recommendations often included the following suggestions:

- Avoid pronouns 'she/he' in recruitment and course materials;
- Avoid terms that position men as aberration to the norm (e.g. 'male nurse');
- Ensure diverse images of students and workforce.

Visual representations that included men were seen as important to counter the prevailing view of these fields as 'women's work' and demonstrate men also work in these careers. However, there was also a unanimous agreement that this consideration needed to be balanced against representing the student and workforce profile in realistic ways (Whitford, H, et al, 2018).

Discussions of specific professions also raised issues with particular terms. For example, a paper on speech and language therapy recruitment suggested the very term 'therapist' was perceived to suggest a female therapist (Litosseliti, L and Leadbeater, C, 2013). The paper, therefore, suggested changing the professional title to remove female connotations of the term. Similar suggestions were made in discussions of early years childcare, for example, re-labelling the term into 'early childhood education and care' to make it sound more professional and build in associations with education, sport and leisure activities (Davies, J, 2017).

To make nursing and allied health more visibly linked to masculinity, various studies have also highlighted particular aspects of nursing and allied health careers as important for attracting men into these fields. These ranged from more generic aspirations related to work and careers to those more specific to working in nursing and allied health. Recommendations for particular aspects to be promoted were often based on previous

research findings on motivations driving male choices of courses and careers. While these were highlighted as important to men, there was also recognition that many of these had a cross-gender appeal.

Generic motivations driving study subject and career choices that were perceived as important to men included: financial security; career progression; (geographic) mobility; autonomy; variety of opportunities and work; and transferability of skills (Boyd, S and Hewlett, N, 2001; Greenwood, N, Wright, JA and Bithell, C, 2006; Whitford, H, et al, 2018). In terms of motivations more specific to nursing and allied health careers, men who chose these fields often cited similar reasons as women. Namely, wanting to work in a caring profession where they can help people and have a worthwhile career was cited as central to choosing these professions. Additionally, greater participation of men in certain areas of nursing and allied health could potentially point to the importance of visible cultural links with masculinity. For example, the strong connotation between physiotherapy and sport, diagnostic radiography and technology, or 'thrill seeking' associated with paramedic science, potentially suggest the importance of more visible links to traditional masculinity for attracting more men.

Further recommendations for promoting nursing and allied health stressed the importance of focusing on attributes and skills for presenting these careers in more gender-neutral terms or more aligned with cultural notions of masculinity. For example, the recent Scottish study of male participation in nursing recommended that marketing needed to focus on skills and attributes required for nursing work to re-brand the career in gender-neutral terms (Whitford, H, et al, 2018). Other studies suggested highlighting particular skills and attributes perceived as important to male students, including problem-solving logical skills, interest in science and health and interest in academically challenging subjects.

In terms of the marketing formats and channels suggested and used, most of these were fairly consistent across different initiatives aiming to reduce the gender gap in sectors as diverse as healthcare, STEM subjects and education. Typically, they involved campaigns focused on online and outreach activity and resources to promote particular careers. For example, a project to attract more women to engineering involved an extensive campaign which included: an interactive website for potential female students; outreach materials for schools to help them promote engineering to interested female students; resources for engineers to help start the dialogue about the importance of attracting more women to engineering (Sullivan, B, 2007). Projects aiming to attract more men to early years education often involved similar elements but also some additional ones, for example, local champions promoting the issue with schools and in various forums (Fatherhood Institute, 2017). More rarely, such initiatives also ventured into the realm of popular culture, for example, by promoting engineering through TV programmes for children and games focused on maths and science (Sullivan, B, 2007).

The marketing strategies discussed in this section were mainly based on recommendations arising from the research on barriers, motivations and perceptions of nursing and allied health, rather than exploration of male students' views on existing marketing of these subjects and careers. The qualitative research phase of this study builds on this previous work by testing the hypotheses around recommended strategies. It also expands the previous findings through providing a comprehensive exploration of male students' and

other key audiences' views on existing nursing and allied health marketing and recruitment materials. Specifically, the qualitative research explored male students' and other key audiences' views on how nursing and allied health were marketed in terms of imagery, language, particular aspects of these careers or skills and attributes. It also captured male students' views on how these different elements of marketing were gendered and aspects that would make these careers more attractive to this audience.

3.2.2. Education and exposure

Education and outreach activities are other major types of initiative aiming to reduce the gender gap in the careers where men or women are under-represented. While they present a distinct group of approaches to this issue, there is still a lot of overlap between them and marketing initiatives. Both types of initiative have similar aims and considerations around alternative ways of representing particular careers. Additionally, educational and outreach activities are often key channels used by wider marketing initiatives to disseminate particular messages.

A range of approaches in this area were discussed in the literature (Carnevale, T and Priode, K, 2018; Dean, E, 2018; Engineering UK, 2018; Davies, J, 2017; Greenwood, N, Wright, JA and Bithell, C, 2006; Steven, K and Thomas, L, 2019; Whitford, H, et al, 2018), but typically education and outreach activities involved one or more of the following:

- School visits to raise awareness and engage potential students with particular careers;
- Activities for school children and young people where they can gain experience of the subject or career;
- Courses for boys or girls (or both) which introduce particular subjects and careers to them and allow them to experience studying or working in that field;
- Connecting potential students with current students and professionals working in a particular field;
- Resources for teachers which promote particular careers and can be used within school curriculum;
- Resources for career advisors to help them introduce particular careers in ways that can attract under-represented groups of students;
- Incorporating the approaches developed to attract under-represented groups of students within career fairs and open days at universities and further education colleges.

The impact of such activities on reducing the gender gap in recruitment is not always clear as evaluations of these programmes are often not available. However, where these programmes were evaluated, there is some evidence that they can be effective in a number of ways. Specifically, particular programmes that involved school visits, resources for teachers and other key influencers, or activities and courses have had a positive impact on:

- Students' awareness of, and knowledge about, particular careers, work involved in them and career opportunities;

- Students' perceptions of, and confidence in, their own skills as related to particular careers;
- Changing gender stereotypes in perceptions of particular careers;
- Increasing the relevance and appeal of particular careers previously considered as irrelevant to them (due to their gender or other reasons).

An example of such a programme was the pilot *Step into the NHS*, which ran in selected primary schools in England in 2018 with the aim of raising awareness of health professions and challenging gender-stereotypical views about them (Kids Connections, 2018b). The programme involved several elements that allowed students to explore the range of roles in the NHS and supported teachers to deliver career sessions based on the materials provided. Within this, a range of resources and formats was utilised, including a temporary website, teacher manual, PowerPoint presentations for career sessions, videos and a pupil competition.

The evaluation of this programme showed it had a positive impact on pupils' understanding of the range of roles in healthcare and perceptions of which jobs boys and girls can do. The range of healthcare roles pupils could list vastly expanded after taking part in the programme. Similarly, there was a significant increase in understanding that boys and girls can do each of the jobs in healthcare. Following the programme, pupils placed girls and boys almost at parity for most jobs in healthcare, which was in contrast to their responses before the programme where certain jobs were seen as more suited to girls. For example, the percentage of respondents believing boys could be nurses increased from 49% to 86%. Similarly, consideration of healthcare careers as potential future careers increased after taking part in the programme (Kids Connections, 2018b).

In other sectors, such as engineering, taster or introductory courses for female students have been effective in achieving similar results. Such courses were delivered by either universities trying to promote their engineering courses to female students or professional organisations working to reduce the gender gap in their profession. For example, the University of Texas ran a week-long residential summer course for female high school students (*E-GIRL*) to raise awareness of engineering options and provide exposure to university experience and engineering (Cloutier, A, et al, 2018). The course was structured around the interests of female students studying STEM subjects, for example, the environment. It also challenged stereotypes female students held about engineering as not being people-oriented by showing how engineering related to people and real-world problems. It further focused on raising understanding and confidence among female students around the skills required in engineering. Following the course, students' self-assessment of the skills they had which were required for engineering showed a marked improvement. The evaluation of the programme also found improved understanding of engineering and the number of responses referencing students wanting to become engineers to help people doubled.

A similar (but non-residential) course in the US was run by the National Science Foundation to attract particular groups of under-represented students to STEM, including female students and students from rural areas (Naizer, G, Hawthorne, MJ and Henley, TB, 2014). An important aspect of the course was that female and students from rural areas were selected to teach lessons and provide role models. The evaluation of the programme suggested this

was critical to its success as the programme engendered the idea that anything was possible. Teachers were involved in helping with the course but also learning how to promote STEM subjects, which in the long-run helped with ongoing collaboration. Both male and female middle school students showed an increased interest in STEM and confidence in their problem-solving skills. Following the programme, students felt more comfortable with STEM subjects, showed a better understanding of higher education degrees and an increased likelihood of considering taking up these courses. The programme also had a considerable impact on female students' ideas about their abilities in this area, closing the gender gap in this respect. The post-programme survey indicated that women did not have a lower preference for maths than men. Similar initiatives have also been frequently recommended as a strategy for attracting more men into early years childcare and education, although evaluations of such programmes were lacking.

Providing role models from under-represented groups to help attract students from those groups, as in the programme above, frequently featured as a recommended strategy and important aspect of recruitment initiatives. The 2018 Scottish nursing study (Whitford, H, et al, 2018) found that involving male students and professionals in university open days was a common feature of recruitment strategies to attract more men into nursing. Discussions of women in science careers, men in allied health professions or early years teaching have also often stressed the importance of providing role models to female and male students respectively. Mechanisms for implementing these suggestions ranged from developing a website that promotes successful female scientists to mentoring programmes where potential male students are supported by current male students or professionals working in particular fields (e.g. early years childcare and education).

For example, in 2014 the University College of London (UCL) introduced a 50:50 Strategy for their pre-19 engineering engagement, requiring even participation of girls and boys in their engagement programmes (Engineering UK, 2018). The programme was implemented across STEM subjects at UCL and it annually connects over 6000 young people and 529 schools with 623 UCL engineering staff and students. The programme works by pairing up potential students with current students and staff who share their experience of, and pathways to, engineering. As Dr Elpida Makrygianni, engineering education developer and coordinator at UCL, explains:

This enables young people to begin establishing a network of social contacts with real engineers close to their age, and to feel our programmes are inherently inclusive and 'for them'. As a result, our 50:50 Strategy has created a real step change in diversity, with girls' participation rates in our programmes seeing an increase from 19% to 63% in under a year, and a similar rise for BAME pupils. [Engineering UK, 2018, p14.]

Across these different initiatives, there are particular features of the programmes and learnings that are worth highlighting as potentially important for effective interventions.

- **Focus on themes of interest to particular groups.** Evidence-led choice of themes that interest particular groups of students can help increase the appeal of, and engagement with, courses designed to attract under-represented student groups into particular careers.

- **Use of role models.** A widespread method used to demonstrate that people from under-represented groups can and do work in those fields and allow for sharing of experience and mentoring. The method has the potential to increase the relevance of particular careers as they start being perceived as ‘for people like me’ and confidence in own ability to enter those careers.
- **Providing information and experience of subject and work.** As there is very low awareness of the careers discussed here, even presenting students with information about career opportunities works well to put these careers on students’ horizons. Further exposure to these subjects and careers through experience can help – e.g. through introductory courses, practical activities or work shadowing.
- **Increasing students’ confidence in required skills.** A focus on the skills required for particular careers has been suggested as a strategy that can help overcome limited ideas about the work involved or gender stereotypes about it. Programmes that helped students recognise they had relevant skills or helped to develop those skills worked well to increase confidence in own capability to go into particular careers.
- **Sharing pathways into careers.** School-based programmes have revealed students are interested to understand not only what professionals in certain careers do but also how they went into those careers.
- **Fit with school curriculum and ethos.** School engagement programmes also work well when they involve materials that can be linked with the school curriculum through Personal Social Health & Economic education (PSHE) or subjects such as body, health and technology or which are related to school values, for example, caring and diversity.
- **Flexible, adaptable and diverse materials.** Engagement work with teachers suggests teachers want to be able to adapt materials to different formats and duration of activities focused on careers. Materials that involve diverse formats are also well received by children, particularly videos and interactive formats (e.g. competitions).

One notable gap in the discussions of various initiatives and programmes was parent engagement. While the importance of engaging parents was sometimes recognised, examples of how this could work were generally missing. Where parent engagement was mentioned in more specific terms, suggestions were made that school engagement programmes should also include leaflets for parents. Another piece of research on primary school pupils engagement found that parents would also be happy to support their children in completing projects with a career focus (Kids Connections, 2018a). Additionally, engagement work with secondary school career counsellors was a frequently recommended strategy but none of the initiatives identified within this literature review focused on this.

These gaps were addressed through the qualitative research by exploring parents’, teachers’ and career advisors’ roles as influencers on male students’ subject and career choices and how they could be engaged to raise awareness of nursing and allied health subjects among male students. The qualitative research phase also involved testing and exploring of the key

education and exposure strategies discussed above with the relevant audiences. Specifically, descriptions of a range of different outreach approaches – for example school visits, summer courses, mentoring or work shadowing – were shared with male students and other audiences to understand their views, needs and preferences with regards to promoting nursing and allied health in these ways.

3.2.3. Other initiatives

There were some further strategies highlighted in the literature on reducing the gender gap in careers within healthcare, engineering and early years childcare and education. Examples of these strategies are discussed below.

- **Review of gender bias in recruitment and course materials.** Studies about male or female students' and professionals' experiences in fields where they are the under-represented gender highlight the associated challenges. These can vary from feeling isolated and/or conspicuous, being expected to both conform to, and diverge from, gender stereotypes, or missing out on opportunities that come through work social networks. Male-or female-dominated recruitment panels can potentially also have unconscious biases that favour female or male candidates and recruitment processes may also have hidden gender (or other) biases. Various studies and commentators have therefore suggested that there may be a need for unconscious bias training for staff involved in recruitment and employers (Whitford, H, et al, 2018). An article by the Royal College of Nursing (RCN, 2018) also cited an example from the Queen's University Belfast which looked at their selection processes and introduced a 'multiple mini interview' (MMI) format, which they felt may be designed better to assess communication, caring and empathy qualities when interviewing men. There was, however, very little discussion generally of what unconscious bias training for staff would involve.

Gender bias was sometimes also discussed with regard to course materials (Whitford, H, et al, 2018). Making course materials inclusive and removing gender bias was seen as critical for retention of male or female students in subjects where they were under-represented. As these initiatives mainly concerned retention rather than recruitment, they were deemed outside of the scope of this project.

- **Gender equality, diversity and widening participation actions, targets and frameworks.** There were also instances of policies or voluntary charters that aimed to improve gender balance in student participation. These were framed either in gender equality or widening participation terms or both. For example, in 2016 the Scottish Funding Council introduced its Gender Action Plan (GAP) which set targets to address gender imbalance in university and college courses (SFC, 2016, 2019).¹⁶

¹⁶ The SFC 2019 annual progress report on the GAP noted "good progress has been made in developing awareness and action to tackle men's under-representation, specifically in nursing and early years" (p.8). The report also stated the story was less positive in terms of achieving more gender-balanced student participation in specific university courses skewed towards one gender. While male participation dropped in engineering by

Universities and colleges are required to reduce the gender gap at the very least to 75:25 by 2030 for all courses.

A recent report about initiatives to improve diversity in student participation in Scotland reviewed a range of initiatives, which coincided with the introduction of the GAP (Steven, K and Thomas, L, 2019). Due to the policy context, most institutions chose to focus on gender and implemented a range of approaches to reduce the gender gap. Some of these involved 'positive action approaches', such as preferential treatment of female or male applicants or students in certain instances. For example, Scotland's Rural College attempted to address lower male participation in veterinary nursing programmes through changes to the interview process. Male candidates are now all invited on the same day so they would not feel self-conscious about being the only male candidate.

Other positive action approaches have been advocated to increase male or female participation in courses where they were under-represented. For example, a report by the Fatherhood Institute (Davies, J, 2017) looking at how men could be attracted to early years childcare and education recommended that places should be reserved for male applicants to courses in this area. Similar recommendations were put forward with regards to female applicants to STEM courses. In other cases, positive action involved additional financial support for under-represented students. For example, in 2017 the University of Coventry secured a £30,000 fund to assist 10 men with bursaries of £1000 per year to study nursing, physiotherapy, midwifery, occupational therapy and dietetics (Clifton, A et al, 2018). The university framed the initiative as positive action and the first to employ financial incentives to attract men into these subjects in the UK.

In addition, the Athena SWAN Charter provides another opportunity for universities to align their widening participation efforts with their gender equality commitments and duties. Established in 2005, the charter's initial focus on gender equality and women in science, technology, engineering, medicine and mathematics (STEMM) was subsequently widened to include arts, social sciences, humanities, business and law departments. While the main focus of the charter is on gender equality with regards to university staff, it also includes issues of gender equality in student participation. More recently, the focus in this respect has been broadened to consider male under-representation too.

However, the Equality Challenge Unit (ECU), which manages the Athena SWAN Charter, noted that historically equality and diversity and widening participation activities have been separate and not aligned within universities (ECU, 2013). In addition, the focus of university members of the Athena SWAN Charter has been mainly on staff. There are opportunities and benefits, however, from greater alignment of gender equality and diversity initiatives with widening student participation work. Examples of such efforts come from universities which have addressed widening participation within the Athena SWAN Charter context. For

3.1% and increased in nursing by 0.8%, the gender gap was increased in some other subjects. However, this was based on a comparison between 2011-2012 and 2016-2017. Therefore, the latest data considered was just after the GAP was introduced and it was too early to expect significant developments.

example, the University of St Andrews developed links with the Scottish Resource Centre for Women in Science, Engineering and Technology (SRC) to establish on-site workshops for women studying and working in STEM (ECU, 2013). Another example cited in literature is from the University of Nottingham which worked within the Athena SWAN framework to promote gender equality across the board following concerns that the university was less likely to offer nursing places to men (Clifton, A et al, 2018).

- **Making professions more attractive to both genders.** Some papers made suggestions about the wider changes required in their profession to make it more appealing to students from under-represented groups. For example, the Fatherhood Institute recommendations on attracting men into early years education and childcare included a call to increase pay in the sector to attract more men (Davies, J, 2017). In a slightly different way but relevant to this issue, the RCN also raised the issue of whether female domination of the nursing workforce is suppressing pay (Dean, E 2018). Another example in this area is a suggestion to diversify speech and language therapy as a profession to make it more attractive (Litosseliti, L and Leadbeater, C, 2013). As calls for changing the professions and work conditions go far beyond widening student participation efforts, they were considered to be outside of the scope of this literature review focusing on initiatives to reduce the gender gap in student participation.

3.2.4. Gender-related considerations

Finally, there are some important considerations and sensitivities around initiatives to increase male participation in nursing and allied health subjects and careers that need to be taken into account:

- How increasing male participation relates to broader gender equality issues within these professions;
- Merits of male-specific recruitment strategies versus those that target all potential students;
- Balance between highlighting aspects of these careers that link to traditional masculinity and overcoming gender-stereotypes;
- Importance of changing perceptions of these careers in general and with everyone rather than in the context of appealing to men.

Studies have frequently noted a phenomenon named 'glass elevator' where men in female-dominated professions experience quicker career progression and dominate senior roles (Beagan, BL and Fredericks, E, 2018; Dean, E, 2018; Litosseliti, L and Leadbeater, C, 2013; Matthews, E, 2019; Whitford, H, et al, 2018). As a result, there may be a gender pay gap in female-dominated professions too. For example, a 16% pay gap in nursing favouring men was cited (Dean, E, 2018). In this context, female professionals in these careers may want reassurances that efforts to increase male participation in these careers will be aligned with action to reduce a gender gap with regards to career progression and pay. Initiatives, such

as the Coventry University bursary for male students of nursing, may also prove controversial when viewed in the broader context of a gender pay gap in nursing.

Another issue where there was a difference of opinion concerned the merits of male-specific campaigns versus those targeting everyone. Most recently, this was debated at the RCN Congress (RCN, 2018) where members voted against the suggestion for male-specific campaign:

There was a 'lively' debate at RCN Congress in May 2018 about whether men should be the target of directed campaigns to increase recruitment into nursing. The resolution that the RCN develop a campaign to target men more directly was not backed by delegates who decided that any nursing recruitment drive should appeal to everyone. (RCN, 2018)

In other instances, gender-specific recruitment strategies were accepted and found to be beneficial. Positive examples of such approaches included: female- or male-only introductory summer courses to particular subjects; mentoring where potential male students are paired with male current students or professionals; inviting male applicants to attend university interview together to make them feel less conspicuous.

There is further a tension between reinforcing traditional masculinity and overcoming gender stereotypes that needs to be considered. To some extent, this tension is evident in the experiences of men in female-dominated courses or careers. They may be expected both to 'step in' performing some traditional masculine roles (e.g. be treated as 'muscle power') but also to overcome gender stereotypes (e.g. be caring). Marketing strategies too often aim to align particular subjects and careers with traditional masculine interests, for example sport or technology, but also to overcome stereotypical notions of masculinity too. A University of Dundee campaign Men Do Care is an example of the latter approach that directly tackles the key gender stereotype that caring is female work (Clifton, A et al, 2018).

Achieving the balance between linking these subjects to traditional masculinity and overcoming gender stereotypes is important. Without this, there may be a risk that gender stereotypes which pose barriers to male participation are reinforced for both men and women. For example, suggestions that these courses and careers should be presented as academically challenging in order to attract more men, may come across as implying that academic challenge is more important to men than women. Similarly, by focusing on perceived traditional aspects of masculinity, marketing strategies may miss the importance of emphasising that men are caring too.

A related point was made by commentators who stressed the importance of changing perceptions of nursing or allied health subjects for everyone rather than specifically to attract men. For example, Kuehnert, P (2019) argued there was a need to generally change the perception of nursing from a profession mainly focused on care to one where expertise and autonomy were central to the role, rather than place these efforts in the context of attracting men. Similar suggestions were made for some allied health professions, for example, showing that speech and language therapy has a scientific basis (Greenwood, N, Wright, JA and Bithell, C, 2006).

The issues discussed above were considered when developing the qualitative research approach. Specifically, the research included female students to ensure any potential issues with strategies to increase male participation could be considered from their point of view too. Also, the research stimulus materials were chosen to ensure a variety of marketing examples were shared with respondents in terms of whether they reinforced, consciously used or subverted gender stereotypes. The research also captured respondents' views on the merits and downsides of male-centred strategies versus those that were directed at both genders.

4. Qualitative research

The qualitative research phase was used to test and refine the existing research findings, as well as expand understanding where gaps were identified. Specifically, qualitative research focused on three main thematic areas. Firstly, it explored key factors and influences informing students' study and career decision-making more broadly. Secondly, it looked at barriers to male participation to nursing and allied health subjects and careers. Thirdly, the qualitative research explored in detail male students' and other key audiences' views, preferences and needs from marketing and other interventions required to increase male participation in these subjects. The qualitative research report below details the findings from each of these main thematic areas, broadly organising them to help understand the context, the problem and the solutions. The last section on marketing and other solutions to reduce the gender gap in nursing and allied health also includes recommendations as they relate to particular themes, sectors and organisations.

4.1. Context: Students' study and career decision-making

4.1.1. Subject choices

Personal interests, academic performance and entry requirements for further study and career were the three main factors informing male and female students' subject choices. Students reported choosing subjects they enjoyed, they were good at and that would be useful for their future study or career choices. These key reasons were relevant across different education levels – GCSE, A level/BTEC and university – even if there were variations in how prominent different factors were at different stages.

Wanting to enjoy what they study was a key priority for many, as they felt this was important for their satisfaction and would also make them more committed and hard-working. Students explained their interest in particular subjects with reference to specific topics they found interesting to study, for example, anatomy in biology, how the human mind works in psychology or radiation in physics. For many, their interests were also linked to activities they enjoyed within particular subjects, for example, problem-solving or hands-on design tasks. In addition, students also stressed having a good teacher in a particular subject as another reason for enjoying that subject.

Decisions are led by whether I enjoy it. In the future I want to enjoy what I do. [M, GCSE, C2DE, BME, Midlands]

Academic performance and the grades students received in particular subjects further guided their subject choices. Students wanted to do well in their future study (and career) and therefore often chose those subjects where they felt they were likely to be successful based on their past performance. Typically, students also enjoyed the subjects they were good at, seeing them as a good fit with their strengths and personality.

For GCSEs, I picked German mostly because they [school] suggested I do it because I was good at it. [M, GCSE, ABC1, BME Asian, Hertfordshire]

Students' ideas about their potential future study and career and related entry requirements also directed their present subject choices. A minority had firm ideas about what they wanted to do from an early age and this governed their subject choices, for example, choosing particular sciences because they wanted to study medicine. Many were less certain about the exact careers they wanted, but still had a broad sense of the type of areas they might want to work in, which guided their subject choices. Others struggled to decide between various different possibilities, struck by a feeling they never really knew what they might want to do in the future. Students in the last two groups often chose subjects that would 'keep their options open'. This either involved choosing traditional subjects they thought employers appreciated, e.g. maths or English, or choosing diverse subjects to allow for different possibilities, e.g. combining history, business and maths.

I was thinking about where I wanted to go which was computer science, so I needed to pick subjects which would help me to achieve that. [Male, A level, C2DE, Hertfordshire]

The importance of each of these factors varied depending on students' age and level of education. Younger students choosing their optional GCSE subjects were often primarily driven by what they enjoyed, with the other two considerations sometimes secondary. Once students had their GCSE grades, however, this provided an additional guide for choosing A level subjects based on academic performance, in addition to enjoyment. As students progressed to A levels, BTEC and university, considering and deciding on potential careers became more urgent for many. With this, meeting entry requirements became the dominant criterion when choosing subjects for all those who knew what they wanted to study and do in the future.

4.1.2. Career choices and considerations

Students' accounts of their career decision-making highlighted particular key phases and moments in this process. Students often began by recalling how glamorous or unrealistic their career ideas were during primary school, for example, boys wanting to be footballers or astronauts. Having started like this, the whole process of choosing a career was often perceived as one of growing up and coming to terms with the realities of work. Parents' and teachers' comments on this topic often echoed this view.

They [kids] change through their life, they are unrealistic. [My son] wanted to be an astronaut when he was young and then a footballer. He then watched a programme with a lawyer in and then wanted to do that. [Mum, son doing A levels, ABC1, Bristol]

During secondary school, certain key moments prompted students to consider potential future careers in more realistic terms. Having to make their subject choices for GCSE, A level or BTEC studies, led many to find out and consider how school subjects related to the world of work and different careers. Needing to organise and take part in work experience was a further prompt for some to think about what they might like or dislike doing in the future. In these key moments, many students were actively considering potential careers to help them make subject choices. This was particularly the case from Year 11, whereas prior to that students sometimes felt there was less urgency and still ample time to decide.

I think I probably first started thinking about careers in Year 10, 11, when I did my first set of work experience. That's the point where you start to understand how the world works a bit; how certain things are not as viable as others and how, for example, if you specialise in one particular area, you might get a job in this place, or that place. [Male, A level, ABC1, Leeds]

When they considered potential future careers, students employed criteria associated with emotional benefits of work, as well as pragmatic criteria to assess how desirable different careers were for them. Emotional criteria concerned personal interests and qualities and different aspects of the job important for job satisfaction. Pragmatic criteria involved material benefits and practical aspects of working in particular careers, for example, pay, career progression and work-life balance.

Most respondents, both male and female, aspired to a career where they would enjoy their work, find it interesting and be good at it. Students drew on their experience to assess what that might be, so school subjects and activities they enjoyed and were good at were the main guide in this respect. For example, a student might express an interest in engineering if they liked and did well at physics, problem-solving and 'hands-on' activities. Students' subject and activity-related interests and strengths were sometimes gendered, for example, male students were more likely to cite technology or sport as interests relevant to their potential career choices. In addition, variety of work was often felt to be extremely important for keeping work interesting over time. Male students, in particular, often cared strongly for working in varied places as they dreaded being 'stuck' in one place.

Personal interest is important because I want to do something that I actually like. I don't want to just get bored all the time and live for the weekend. [Male, GCSE, C2DE, Bristol]

I knew I wanted to go into medicine because I always really enjoyed science and medicine also has the human aspect within it rather than just being stuck in a lab by myself. [Male, A level, C2DE, London]

Job status was not raised as important when considering careers, as many students stressed they were not driven by how others perceived certain work. However, being respected and having autonomy at work still mattered greatly, as male students cited the perceived lack of

these as reasons for not considering certain healthcare careers (see section 4.2. for a discussion of this).

More altruistic emotional benefits of work – for example, job satisfaction from helping others – were seldom mentioned spontaneously by male secondary school students. When directly probed about this, most male students agreed it would be very rewarding to feel you helped others through your work. However, many still perceived such a reward as an ‘added bonus’ but still secondary to some other key requirements – for work to be interesting and meet various more pragmatic criteria. A few male respondents also explained they wanted to be in work where they could pursue their ambitions and achieve their potential rather than be invested in helping others. Conversely, it was more common for female students in this sample to explain their interest in particular careers with reference to wanting to help others. This was partly the case because female students in this sample – reflecting the wider student population – were more likely to consider healthcare careers as an option.

I don't think I'd be able to do it. I don't think I have the mind-set to think that someone is very ill so I need to put all my effort into them. [Male, GCSE, C2DE, Bristol]

I like the idea of having a positive impact on people. If you can come home and say you have helped people and enjoyed the day, I don't think you can get better job satisfaction. I'm happy when someone else is happy with me. [Female, A level, ABC1, Leeds]

Material and more practical aspects of work and different careers were important to all students, but some students were more likely to prioritise these over other criteria. For many male students, pay and career progression were as important as their other key priority of enjoying work. Often, they looked for a compromise between the two and hoped to find work they would enjoy but which would also pay well. This was particularly the attitude of ABC1 male students, whereas some C2DE male students¹⁷ prioritised pay over other criteria as they felt more urgency to be financially independent from a younger age. Female students also cared about pay, but importantly were less likely to be deterred from considering certain careers due to perceptions of low pay, e.g. nursing.

Pay is most important. It gives you a good life, security for you and your children. Then probably job security comes next, because it ensures that you'll keep working until you retire. [Male, GCSE student, C2DE, Bristol]

Other practical considerations such as employment prospects and work-life balance also guided students' decisions. Students and their parents alike wanted stable employment at

¹⁷ ABC1 and C2DE refer to particular social grades as defined by the classification developed by the British National Readership Survey (NRS) and widely used within market research since the 1960s. Social grade is a demographic classification system that allows classifying of households and its members based on the occupation of the Chief Income Earner. Groups A-E are defined as follows in terms of the occupations they include: A = High managerial, administrative or professional; B = Intermediate managerial, administrative or professional; C1 = Supervisory, clerical and junior managerial, administrative or professional; C2 = Skilled manual workers; D = Semi and unskilled manual workers; E = State pensioners, casual or lowest grade workers, unemployed with state benefits only.

the end of their studies and careers that could offer this held appeal. Good work-life balance was important to male and female students alike, as students worried that excessive workload and work hours would be detrimental to their life and wellbeing. Accordingly, poor work-life balance was cited as one of the reasons for not considering particular careers which students believed involved high workload and long hours, e.g. certain healthcare careers.

The hours are important. You don't want to be spending all your hours working. [Male, GCSE, ABC1, Manchester]

4.1.3. Influences on student decision-making

Research with students, parents, teachers and career advisors revealed an array of influences from diverse sources which led and helped shape students' study and career-related decisions. These ranged from those in students' immediate environment, including family, friends and school, to influences from wider culture and society, such as television, online media, universities and various organisations concerned with education and careers.

Both students and parents commonly reported how students discussed study and career-related decisions with parents to help them decide. With A level students, parents often also researched university courses and careers either together with their child or on their own so they could pass this information to them. Parents were keen to stress, however, that they did not suggest any particular careers but wanted to make sure their children made the choices that would be good for them. Parents saw their influence primarily in terms of supporting their children to identify subjects and careers they could enjoy and be good at. Many strongly felt it was important for their child to choose something they would enjoy as this would make them more likely to be committed. Some parents also stressed they wanted their sons to choose subjects that would lead them to stable employment and some fathers, in particular, also highlighted the importance of pay and career progression. Those parents who researched university courses and careers also exerted influence through raising awareness to their children of particular subjects and careers.

I am a firm believer in him doing what he is interested in at this stage and I encourage him to think about the next steps and what he wants to do. [Mum, son doing GCSEs, ABC1, Leeds]

Additionally, students were sometimes influenced by study, work and career choices of their parents, older siblings, relatives or friends. This influence came through their sheer exposure, which meant they acquired a level of familiarity with these jobs and careers, could more easily find out what they involved and understand any positives and negatives. Through this, some students developed an interest in similar careers or confidence that these would be good avenues of employment in terms of demand and pay. Conversely, in a small number of cases parents' negative experiences of particular work and careers were mentioned by students as reasons for not considering that work. For example, a couple of male potential students whose mothers were nurses felt their mothers' work was stressful and hard, citing this as one of the reasons for not being interested in that.

I probably first thought what I might want to do at quite a young age. I was influenced by family, friends, people in that field of work. Maybe at 12, 13 years old, I was thinking of going into construction. Family members have done it and come out positive on the other side of it. [Male, GCSE, C2DE, Bristol]

Personal or family experience more widely was also an important influence, particularly relevant to healthcare. Often, this was cited as one of key reasons for getting interested in healthcare by current students of nursing and allied health, but also potential students with similar interests. For example, respondents talked about appreciating the care their family members received and seeing how working in healthcare was worthwhile and rewarding. In a smaller number of cases, experiences of receiving healthcare had a negative impact on respondents' interest in this area, as they left feeling healthcare professionals were under tremendous pressure and stressed.

I decided that I wanted to go into nursing when my mother got unwell and I saw the really good care that she received when she was unwell. It was a reason closer to home and I thought 'I could do that for someone'. [Male, Current student, Adult nursing]

Students were also exposed to different influences on their study and career decisions at school. This ranged from informal discussions with teachers to help decide which subjects to choose, through group or individual sessions with internally provided career advisors, or career events run by external organisations at their school. Students' experiences of school career advice highlighted some key issues in this area.

Firstly, many students felt career advice at school was too often constrained by the school focus on ensuring good grades. Students commented how the school directed them towards choosing the subjects they did well at rather than exploring career opportunities more widely with them. They also felt that a focus on grades meant that the curriculum was insufficiently linked to work and careers, with the exception of teachers particularly interested in promoting certain careers. Career advisors also commented how teachers struggled to find time to link subjects and careers.

If you were to take sociology, health and social care, or another subject, maybe it should be laid out: 'Well, you could go into speech and language therapy if you were to take that GCSE.' But at the moment, it just seems like our GCSEs are stepping stones to get you to choose A-levels, that's what really matters. [Male, GCSE, ABC1, Leeds]

Secondly, many felt that individual sessions with career advisors had a very narrow focus rather than helping them find out about a wider range of opportunities based on their subjects. For example, some reported how the onus was on them to say what they wanted to do or liked and then career advisors suggested one or two possible options based on that, which were typically more well-known careers.

Thirdly, students' accounts revealed hugely different experiences and extremely patchy school provision of career advice, ranging from minimal to comprehensive.

They used to make you go talk to the careers adviser in our school. I'm not going to say she wasn't helpful, but she didn't help me at all. She said "What are you

interested in?” and I said “I don’t know”. Then she asked what subjects I took and as soon as I said business, she said ‘Why don’t you go into business?’. So, she didn’t really give me any opportunity to discuss what I wanted to do. [Female, A level, ABC1, Bristol]

The kind of career advice students found most interesting was where they could learn from someone’s personal experience of studying for, or working in, a certain career. In particular, students liked hearing from people just slightly older than themselves, for example, older siblings or their friends telling them about A level subjects and teachers or students coming into their school to talk to them about how they got into particular courses and their experience of studying. Many also found interesting being able to speak to professionals in particular careers and find out from them what their work involved.

Most were keen to get work experience, which was seen as the best way to find out what a particular line of work involved, and whether it suited them. Some complained, however, that it was extremely difficult to get work experience in general, let alone in what they were interested in. Their experiences also varied in how much support they received from the school – some were supported but others were left to their own devices and help from parents. Often, they did work experience in a random area rather than what they would have wanted, which many felt was a missed opportunity.

Work experience and shadowing are good because you can see if it is hard or easy, or if you are interested in it. [Male, GCSE, C2DE, Midlands]

As students progressed through their A levels or BTECs, most started to more actively research potential courses and careers as next steps. Those aiming to go to university, often went to a few university open days or taster lectures, either through school or by their own arrangement. Most found those events useful for learning about a particular university and courses and helping them to make a choice. However, those who were still unsure which subject to take at that stage felt these events did not help increase their awareness of different courses relevant to their subjects, as open days were often narrowly focused on a single subject. A minority of students reported going to open days which had a fair-like format and found these useful for learning about more than one subject. Only a few students also attended university summer courses, but these intended to help them prepare their application for a course they were already interested in rather than provide mentoring to attract them to particular courses.

I went to one in Nottingham specifically on medicine and there was a part of it where you went on a tour. They had the nursing students separated from the medicine students. So that gap [between nursing and medicine] was already created before you got into a career. It would be better if there was a route that encompasses both aspects. If somebody’s not set on being a doctor, or if they’re scared they’re not going to get the degree, they can also see that nursing’s not that much different. [Male, A level, ABC1, Leeds]

Similar preparations were undertaken by those GCSE students who planned to move to a college, with students and their parents visiting open days at local colleges and finding out about different subjects. As some of these parents reported, colleges often seemed to make

much clearer links between subjects and work than schools, which respondents found useful.

A level and BTEC students also researched universities and courses online, often together with their parents. A minority also searched for apprenticeships as an alternative to university, which a considerable number of respondents in this sample found appealing, wanting to avoid tuition fees and be able to learn through work. Respondents gathered information about particular courses on university websites, but also used a whole range of other online sources. These included websites such as UCAS, National Careers Service (gov.uk), Unifrog, StudentRoom, Notgoingtouni, Which? University and others. In addition to finding out about course content and entry requirements, students appreciated being able to hear from other students about their experience of particular university subjects and courses, e.g. on StudentRoom. Those still unsure which course they wanted to take liked the tools where they could type in their A level subjects and find a wider list of relevant courses and careers based on those subjects.

Wider media and cultural representations of particular careers also influenced students' interests. Students and parents alike cited examples of TV programmes or computer games raising or reinforcing someone's interest in particular careers. Such influence was particularly discussed with regards to younger children, as a source of some early views and feelings about particular careers. For example, a mother recalled how her son went through a phase of wanting to be a lawyer after watching a law TV drama. A GCSE student commented how their younger brother wanted to become a vet and kept playing a vet computer game. Another student reported how their younger sister liked watching a children's programme which included doctors. In addition, a stakeholder interviewed for this research reported how reality TV programmes, such as '24 hours in A&E', prompted some students to apply to paramedic science.

On Nickelodeon there is a programme, the two doctors, twin brothers. I used to watch that when I was younger. That's sort of a stereotype [about doctors being male]. [Male, GCSE, C2DE, Bristol]

4.2. Problem: Barriers to considering nursing and allied health subjects and careers

Some key barriers to male students considering nursing and allied health identified in the literature review were confirmed through this qualitative research, particularly perceptions of nursing work as feminine. However, this research found that similar preconceptions were mostly not at play for allied health, where low awareness was the key barrier. The findings below also flesh out in more detail male students' and parents' feelings around some other barriers to considering these careers, most notably views around the kinds of work nursing is seen to involve, and the perceived status, workload and pay in these careers.

4.2.1. General barriers to considering healthcare

Both male and female students cited squeamishness and significant responsibility as major reasons for not considering working in healthcare. Often, these were mentioned by

respondents who never considered healthcare. However, some students who liked the idea of helping others through healthcare also said they realised they wouldn't be able to deal with the realities of medical work, e.g. blood, human body. Many GCSE, A level and BTEC students of both genders – but particularly male students – also felt they wouldn't want to have to cope emotionally with the stresses and responsibilities of healthcare work. They feared the risk of making a mistake that could have serious negative consequences on someone's health and life. Many further felt they would struggle to deal emotionally with patients not getting better or dying despite their efforts. Because of responsibility for someone's health and life, healthcare professions were perceived as extremely stressful and therefore not for them.

I was little squeamish when I was younger so being a podiatrist for example you would have to deal with a lot of things like ingrown toenails and I'm not particularly enthusiastic about that. [Male, A Level, C2DE, Hertfordshire]

Media, fashion and healthcare are boring [as careers], particularly healthcare which demands a lot of responsibility. I don't know if I'd be able to handle some people and getting annoyed all the time if they require a lot of help. [Male, GCSE, C2DE, Birmingham]

4.2.2. Gender stereotypes

As highlighted by previous research, nursing was perceived as a female-dominated profession which was raised as a significant barrier by male students, parents and teachers alike. At one level, this was a factual statement as respondents were aware that most nurses were female through their own experience of healthcare. As some male students pointed out – particularly current students of nursing but also some potential students – this could make men feel in a minority, out of place and isolated. At another level, respondents referred to cultural perceptions of nursing as 'women's work' and therefore not for men. Often, the two levels of seeing nursing as female – through experience and culture – reinforced each other, as students found confirmation of cultural ideas in their experience of nursing workforce.

I think it [nursing] is a girly job. It is mostly women in that kind of job. It is not the kind of thing that I would go to. [Male, GCSE, C2DE, Midlands]

Respondents varied in whether they were critical of gender stereotypes around nursing or uncritically accepted them. Most parents, teachers and many male A level students criticised the stigma associated with men in nursing, whereas younger male GCSE students were more likely to uncritically see nursing as 'women's work'. However, whether male students were critical or uncritical of these gender stereotypes, the vast majority still felt this was a factor among others that deterred them from considering nursing.

Maybe it is the social stigma because when you close your eyes a lot of people would assume a nurse to be perhaps an elderly woman, so maybe that's why I have never thought about it, I don't know. [Male, A Level, C2DE, London]

The key issue at stake for men here, as this research suggested, was that male students interested in jobs perceived as women's risked ridicule from their male peers and also potentially questioning of their hetero-masculinity. For example, a male GCSE student explained men might be laughed at by their male peers for being interested in nursing because it's seen as a women's job. A similar comment was made by a male student interested in another female-dominated field, fashion and beauty. A mother said her son wouldn't consider nursing as he was very sensitive about how he was perceived. For example, he rejected taking part in a trampolining competition as he thought this might make him seem gay to his friends. Current students of nursing reported how patients or staff sometimes made remarks suggesting they were gay. A healthcare assistant interested in nursing joined the Men in Nursing Together Facebook group having learnt about it through research, only to immediately receive further suggestions from Facebook to join two gay men's groups.

They would probably be teased about it by their friends if they showed an interest in helping kids like that [as a speech and language therapist]. If it was something that made them seemed more sensitive, I don't imagine them particularly keen to go into that subject. [Male, GCSE, ABC1, Leeds]

I remember a patient a couple of weeks ago that automatically assumed I was gay. I try not to be over the top, but he automatically assumed I was gay. It instantly got my back up. I thought there was no need to assume or make those judgements about me when I have to be non-judgemental about you. [Male, Recent graduate, Adult nursing]

Underlying the perceptions of nursing as 'women's work' was the broader cultural and social categorisation of caring work as feminine. While male students did not explicitly associate caring with women, many did comment how caring work was not for them. Sometimes they explained they were not interested in caring as such work focused on helping others rather than advancing themselves. In other words, male students sometimes perceived themselves as too selfish to do caring work. This view was sometimes echoed by parents of boys too. For example, a mother explained how her son was simply not that selfless. At other times, male students imagined caring work in healthcare involved the type of tasks they did not want to do, for example, cleaning after patients. Dislike for what they saw as 'dirty work' of caring in nursing also explained some male students' preference for mental health nursing over adult nursing, as interviews with current students and university admissions staff suggested.

It is not something that would excite me, caring for people. I'm not interested in that kind of stuff. [Male, GCSE, C2DE, Midlands]

I'm not going to do it. I'd run out of patience. I'm not caring enough. I'm too selfish. [Male, GCSE, C2DE, Bristol]

Compared to nursing, secondary school students often lacked similar preconceptions about the gender make-up of allied health professions. Students were generally unaware that particular allied health professions were female-dominated, so this was not cited as a reason for not considering these careers. Male students also generally did not have specific ideas about the kinds of work involved in allied health professions as gendered. For example, while previous research found that dietetics was associated with home economics and women's work, this research found that dietetics was of interest to some male students as they linked it to healthy eating and fitness, which they were interested in. To that extent, gender stereotypes were much less of a barrier to considering allied health professions.

However, this is not to say that gender considerations were completely irrelevant to allied health professions. Broader perceptions of caring work as feminine still impacted on male students' interest in these careers, as they reduced male students' overall interest in care giving professions. Where these professions were associated with working with children, as with speech and language therapy, this could also be perceived as more feminine work. For example, a male potential student commented how a male student interested in helping children might come across as very sensitive so be laughed at by his peers. In addition, some male students' concerns over working in a female-dominated environment may come into play and pose barriers once they found out they would be in a minority in that career.

4.2.3. Low awareness

Low awareness was a major factor for potential students not considering allied health subjects and careers. The umbrella term for this group of health professions was virtually unknown among potential students, parents and teachers alike. In rare cases when parents or teachers thought they heard of the term, they were still unsure what it meant and second-guessed it might be related to private healthcare.

When students, parents and teachers were prompted with a list of allied health professions, the picture was much more mixed in terms of their awareness of individual professions. Typically, the professions that were more widely known included physiotherapy, paramedic science, prosthetics, diagnostic radiography and speech and language therapy. Occasionally, respondents had heard of podiatry if a family member was treated and some thought they heard of occupational therapy but weren't sure what it involved. With professions such as dietetics and operating department practice respondents worked out from their names what they might focus on without necessarily knowing much more than that. Other professions were generally unknown, especially orthoptics, orthotics and therapeutic radiography.

I was struck by the sheer amount of different roles there are [in allied health] because I wouldn't have known any of them. Most of them on there we hadn't been told about. I would possibly look at physiotherapy, that's the most appealing one for me.
[Male, GCSE, ABC1, Manchester]

On a deeper level, low awareness was a barrier even when potential students knew about particular professions such as nursing or certain allied health professions, as their

understanding of these professions was very limited. Students had little or no knowledge of the kinds of work, skills, knowledge, specialisms or career progression opportunities available in these professions. For example, many narrowly imagined nurses worked in hospitals providing less medical aspects of patient care, whereas physiotherapists treated sports injuries and speech and language therapists worked with children who stammer.

All the different sectors of nursing [surprised me] because I always thought you just did a bit of everything. It shows that if you want to do one bit you can, you don't have to do everything. [Male, GCSE, ABC1, Manchester]

Beyond low awareness, there was a wider sense that healthcare professions more generally were not on many male students' horizons. As many GCSE or A level male students said, they simply had not thought about healthcare as an option for them ever. This was echoed in interviews with parents of boys, as some were struck by this and struggled to explain why this might be the case. Some parents suggested it might be because healthcare professions in general were not promoted as much as other professions at their sons' schools. Others felt new technologies or sport were such dominant interests in their sons' lives that they obscured other areas of interest. And even when male students explained this was due to their squeamishness or fear of responsibility, there was still a prevailing sense for many that they just weren't interested in healthcare. Therefore, some of the barriers to considering nursing and allied health stem from a broader lack of consideration of healthcare in general.

Healthcare is not a well promoted career path. It has never been anything that has been showcased to him. I think there are great opportunities but it is not promoted very well. [Mum, son doing GCSEs, ABC1, Leeds]

4.2.4. Perceptions of status, pay and workload

Further barriers to considering nursing and allied health concerned perceptions of status, pay and workload in these professions. These perceptions were partly based on cultural ideas about medical hierarchy, but also on what students and parents heard about nursing and the NHS in the news media. Additionally, family members, relatives or friends working in healthcare, or personal experience of healthcare, also sometimes influenced respondents' ideas in this respect. As before, these ideas were stronger about nursing, where respondents often held some very firm beliefs. Conversely, most respondents were less certain what the situation was like in allied health, but still assumed the overall working conditions in the NHS were likely to be present in those careers too.

Male students and parents alike described medical professions as hierarchical, with doctors higher up in this hierarchy than nurses and allied health professionals. For many potential male students, the perceived lower status of nursing was off-putting. In this view, doctors were nurses' 'bosses' who instructed them what to do, whereas nurses performed the 'dirty tasks' doctors didn't want to do, e.g. personal care and less medical tasks. In such a hierarchy, male students further felt that career progression was limited as no matter how senior nurses became doctors would still remain their seniors. Respondents were typically less sure about the status of allied health professionals within such medical hierarchy, but

some assumed they would be in support roles helping doctors who would be their superiors. While these ideas were vague and less crude than nursing stereotypes, they still suggested questions of status within the medical hierarchy were relevant to allied health professions too.

In Year 12, my college brought people in to talk about the different careers in healthcare, and there was a nurse and she talked about what nurses do. [...] The nurse came across as if the nurses did all the jobs the doctor didn't want to do. I feel it is a bit like that in actual hospitals. When you present it like that, I don't think it's very appealing. She says, if the doctors want you to, you have to wipe this, do this. It wasn't something I necessarily wanted to do. If I'm in a hospital I want to be somebody doing the main checks. It wasn't something I was interested in. [Male, A level, ABC1, Leeds]

Many potential male students and parents further raised the issue of pay and workload within the NHS in general, and nursing in particular. There was a widespread view across different groups of respondents that many nurses were on low incomes. This was further exacerbated, in respondents' views, by high workload many thought nurses had which wasn't reflected in their pay. Both male students and parents of boys often stressed that such a combination of high workload and low pay were reasons against considering nursing careers. Students who were interested in nursing – including some female students, current male students of nursing and some male healthcare support workers – also raised similar issues but prioritised wanting to help others over pay and workload.

They deserve better pay, don't get as much as they should do. If you're very clever and doing science, you aren't going to go into a low paying job. [Male, GCSE, ABC1, Hertfordshire]

If he said he wanted to be an occupational therapist I would question whether he knew fully what it all entails but I think personally it's a role that's so understaffed and underfunded and I think they are desperate for people like that and the service isn't as it should be right now. [Female, son doing GCSEs, C2DE, Midlands]

As in other respects, respondents were less sure what the pay was like within allied health professions, but suspected it wasn't high as they thought only doctors and surgeons were paid well within the NHS. Respondents further assumed the workload may be high in line with their general ideas about the NHS, but were unsure about this. The only allied health profession they were convinced had high workload were paramedics, who they thought similarly suffered from burn-out as nurses.

4.3. Solutions: Marketing and other interventions to increase male participation

4.3.1. Marketing content considerations

Departing from the literature review findings, the qualitative research set out to test and explore different strategies of promoting nursing and allied health careers to identify the

elements that were most appealing to male students. A range of different elements of marketing was explored, including language, imagery, and which messages about nursing and allied health were most relevant to male students' career motivations, personal interests and perceived qualities and skills. To aid this discussion, research stimulus materials were shared with respondents, ranging from broad statements highlighting particular aspects of nursing and allied health to examples of career information, marketing and recruitment materials. The latter were selected from university, professional bodies' and healthcare employers' websites, as well as wider nursing and allied health marketing campaigns. Examples of materials that were shared with respondents included Health Education England's brochures on nursing and allied health careers, *We are the NHS* nursing recruitment campaign advert and *The WOW Show* episode focusing on allied health professions.



Images 1-3: Nursing and allied health marketing and information examples¹⁸

Based on participants' response to research stimulus materials and marketing examples, some key considerations for communications about nursing and allied health subjects and careers emerged. Each of these is discussed below in relation to specific examples of messaging and imagery shared with students. Following this discussion, the section concludes with recommendations for gender-sensitive marketing of nursing and allied health subjects and careers, as well as some more general recommendations for marketing these subjects.

4.3.1.1. Diversity and variety of opportunities

Male and female students, parents, teachers and career advisors alike, were most struck by the sheer variety of different careers available within nursing and allied health. Respondents

¹⁸ Left: Health Careers, Careers in Allied Health Professions; middle: Health Careers, Careers in Nursing; right: *The Wow Show*, *Life Health Careers Special with Q&A* YouTube video still. Detailed references for all images are included in References.

were previously unaware that some of the allied health professions existed. Many also thought of all nursing as ‘general nursing’, unaware of different areas and specialisms. This was new information that made respondents feel they lacked an understanding of these careers and opened them to considering them afresh. It undermined their narrow image of nursing and made them feel there was much more to healthcare than they previously had realised. Importantly, it intrigued some and made them want to find out more about different opportunities that existed within these professions. For example, a student who enjoyed studying about radiation in physics wanted to find out more about radiography, whereas some others who liked psychology were interested to know more about occupational therapy.

Nursing roles at a glance	8	The allied health professions at a glance	8
i The four main fields of nursing	8	i Art therapist	8
Adult nursing	8	ii Dietitian	8
Children’s (paediatric) nursing	9	iii Dramatherapist	9
Learning disabilities nursing	10	iv Music therapist	9
Mental health nursing	10	v Occupational therapist	10
ii Other nursing roles	11	vi Orthoptist	10
District nursing	11	vii Paramedic	11
General practice nursing	12	viii Physiotherapist	11
Health visiting	13	ix Podiatrist/chiroprapist	12
Neonatal nursing	15	x Prosthetist/orthotist	12
Prison nursing	15	xi Radiographer (diagnostic and therapeutic)	13
School nursing	16	xii Speech and language therapist	13

Image 4: Contents pages of HEE booklets on nursing and allied health¹⁹

Everyone just sees the NHS as doctors and nurses. You need people to see and think about all the different staff behind it. Give people a bigger idea in a better way. [Male, GCSE, ABC1, Hertfordshire]

There’s such a wide spectrum you can go into, it’s not just one thing. It changes your mind. It seems less boring because there are many things you can do. You have the choice. [Male, GCSE, C2DE, Bristol]

Many respondents thought students and parents should be made aware of such a variety of opportunities in healthcare early on in education, starting from primary school through to Year 9 when students were choosing GCSE subjects and then again when they were choosing A level subjects. Starting from the primary school level was often felt to be important as this was the time when students felt they formed their narrow ideas about healthcare careers. Some, therefore, felt it was possibly too late by GCSEs and A levels to change much as they already decided they were interested in something else, having never had a chance to consider a wider range of opportunities in healthcare.

When you think of hospitals, although it’s wrong to think of it in this way, you mainly think of it as doctors and nurses. I think it’s just that general perception. I know you shouldn’t really judge a career based on TV shows, but if you think of the biggest TV

¹⁹ Left: Health Careers, Careers in Nursing; right: Health Careers, Careers in Allied Health Professions.

*shows based in hospitals, you don't necessarily see a physiotherapist or a pharmacist
You just see a doctor, nurse and then a surgeon. [Male, A level, ABC1, Leeds]*

The core message many respondents wanted to be communicated early on was that there was more to healthcare careers than doctors and nurses, as well as more to nursing than what they thought of as 'general nursing'.

Examples of good practice: This core message was communicated well in the recent *Step into the NHS* school outreach programme which engaged pupils exactly by telling them how there were more than 350 different roles in the NHS (Kids Connections, 2018b). The message around diversity and wealth of opportunities in allied health in particular was also conveyed by *The Wow Show* episode, which was received well when it was shown to students in this research.

4.3.1.2. Looking through the lens of gender

Male students were highly conscious of any gendered aspects of communications when reviewing nursing and allied health marketing and information. Specifically, they were very attentive to the gender of the people shown, but sometimes also other content such as which aspects of these professions were shown, and language and tone used where these appeared as potentially gendered.

Including men in images of students and professionals in nursing and allied health was seen as critical for communicating to potential male students that these professions were for them too. Where men weren't included in the imagery of nursing as in the image below, or were in a small minority, this was felt to confirm that nursing was a female-dominated career where men may feel out of place. Similarly, it led some to guess whether men were also in a minority in allied health professions if there were fewer images of men than women.



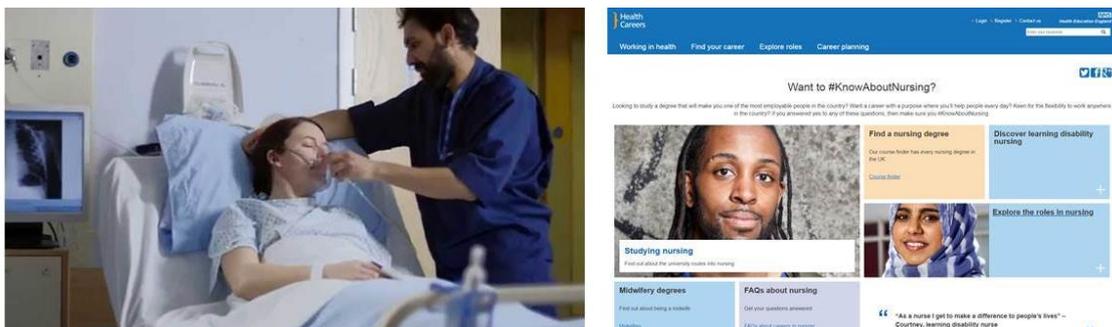
Image 5: Gender of people shown in marketing images 1²⁰

I think just including men in the photos. Obviously this is a good photo showing what nursing is, but if I were to look at that, there are 3 females. Not necessarily because I'd be like: 'It's a girl's job'. I just wouldn't see myself fitting in. For me personally, you need a boy to have a chat with. Having a friendship with a boy is different to having a friendship with a girl. [Male, A level, ABC1, Leeds]

Little differences in how male and female professionals were shown occasionally also confirmed more stereotypical views of healthcare careers. Specifically, differences in dress and uniform between men and women in images could matter and be interpreted as differences in role and status. For example, when images from mental health nursing course pages were shared with respondents, a few thought a man in one of the pictures was a doctor because he wore a shirt whereas a woman was a nurse because she had a uniform, reinforcing the idea that men were doctors and women were nurses.²¹

Conversely, images where male and female professionals were more evenly included and shown doing similar work suggested to respondents that both genders worked in a particular profession. Other images that suggested men were integrated within a profession seen as female-dominated were those where men were shown on their own performing work tasks, showing they were autonomous professionals.

Examples of good practice: The images below are examples of the images highlighted as communicating well that men were integrated in these professions.



Images 6-7: Gender of people shown in marketing images 2²²

There is a female and there's a male next to her, and they're both doing the same job. It shows that it's inclusive. [Male, A level, C2DE, Manchester]

²⁰ King's College MSc Nursing registration courses webpage.

²¹ The image in question can be found here: City University, *Mental Health Nursing BSc homepage*, <https://www.city.ac.uk/study/courses/undergraduate/mental-health-nursing> Accessed on 22nd October 2019

²² Left: The University of Hertfordshire Adult Nursing MSc webpage; right: Health Careers, *Know about nursing* campaign.

Many male students were further drawn to those aspects of nursing and allied health portrayed in marketing materials which they could link to their interests. These were often aligned with stereotypically masculine areas of interest such as technology and sport. When presented with a range of imagery from different nursing and allied health professions, images of technology or sport²³ often raised the most interest. This led some to select radiography and physiotherapy as potentially the most interesting of allied health professions, explaining the higher participation of men in diagnostic radiography and physiotherapy. Some male students also found images of paramedics exciting when they were shown acting in emergency situations and outside of hospital settings.²⁴ This was felt to appeal to male students as many craved being 'out and about' rather than 'stuck' in an office, hospital or a lab, as well as suggesting the job was exciting and heroic which some male students could relate to.



Image 8: Interest in technology as a 'masculine' areas of interest²⁵

The therapeutic radiography and physiotherapy images stand out. I like the technology shown in these photos, it looks interesting. It doesn't look like a boring job. I like the football one, because again it doesn't look boring and it's associated with sports. [Male, GCSE, ABC1, Manchester]

Similarly, some current students of allied health professions suggested that certain areas of their professions may be more appealing to men than others. For example, a mature speech and language therapy student, who switched from a long career in retail, felt he was more interested in working with adult patients whereas he may not feel as comfortable working

²³ Examples of such images that were shared with respondents can be found here: *Physiotherapy and Football*, Football Medicine and Performance Association, <https://www.fmpa.co.uk/physiotherapy/>, Accessed on 22nd October 2019.

²⁴ An example of such images that were shared with respondents can be found here: Paramedic Science, the University of the West of England, <https://courses.uwe.ac.uk/B950/paramedic-science,%20Accessed%20on%2022nd%20October%202019>, Accessed on 22nd October 2019.

²⁵ Image credit: LeventKonuk, <https://www.istockphoto.com/gb/photo/lit-magnetic-resonance-imaging-machine-gm147306474-12618633>.

with children. Looking at the images of speech and language therapy below, this respondent stressed it was important to show the variety of patients speech and language therapists would be working with to appeal to more men.

It's important to communicate that working with SLT isn't just about working with children. Not all men are comfortable with working with children, but they don't necessarily have to go into this area. There are lots of other opportunities. [Male, speech and language therapy student]



Image 9: Speech and Language Therapy university marketing example²⁶

In addition, potential and current male students occasionally picked up on language or tone that suggested to them certain careers were feminine. A mature adult nursing student noted how when he looked at NHS and other information about nursing careers in the past, this was felt to be directed at women. For example, he recalled how fitting nursing work around childcare and maternity was discussed, which suggested to him they were not addressing men too.

When I looked at things from the NHS and other stuff, it was all women the whole way through. And it talks about fitting it around childcare and maternity which can feel quite alienating. Last night I was thinking about whether there are any programmes about nursing. The only guy I could find was Charlie on Casualty. Everything else about nursing is either negative, so nurses who kill, or female-based. [Male, Adult nursing student]

This respondent's experience highlights that when a profession such as nursing is seen as being presented as overwhelmingly female in the mainstream, even little details such as omitting to mention paternity too can send signals that this is not a profession for men.

Some other examples of messaging, language and tone used within the marketing of nursing came across as more feminine to some male students and parents, although views were mixed on this topic. Specifically, the strapline from the *This is Nursing* campaign talked

²⁶ Plymouth Marjon University Speech and Language Therapy Career Day webpage. Left image credit: Kasto80, <https://www.istockphoto.com/gb/photo/cute-little-boy-at-speechtherapist-session-gm853753658-140281525>; right image credit: FatCamera, <https://www.istockphoto.com/gb/photo/young-female-speech-therapist-helping-a-young-patient-gm595131308-102031607>.

about nursing as “a profession where joy meets sadness, where courage must outweigh fear.” Some respondents suggested that an emphasis on emotions such as ‘joy’ and ‘sadness’ made the advert sound more feminine, potentially making men feeling this wasn’t for them. However, other male students and parents disagreed and rather saw this as a reflection of the reality of nursing work that involved emotionally intense and challenging situations. A few male students were also slightly cynical about the emotional tone of the *We are the NHS* nursing advert, resisting what they saw as a marketing ploy to ‘pull the heart strings’ through emotional music and other means. While they did not explicitly link this to gender, it raises a question of whether showing nursing in emotionally charged terms can sometimes communicate to men that this is oriented at women.

It feels like it stands out more to women. Words like ‘joy’ and ‘sadness’. When you think about a job you don’t really think about these things, you think about money. When you go to apply for a job, you don’t think about emotions. [Male, GCSE, ABC1, Manchester]



This Is Nursing

It takes a remarkable person to be a nurse. This is a profession where joy meets sadness, where courage must outweigh fear.

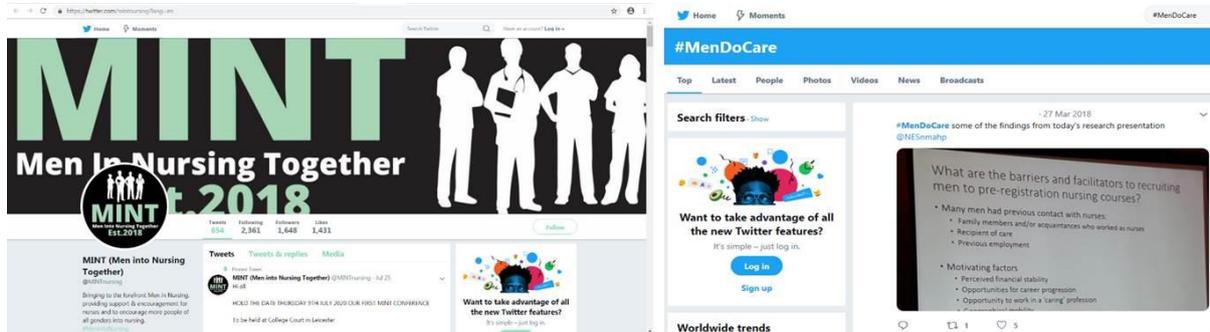
Image 10: This is Nursing campaign²⁷

A few respondents also commented how particular visual styles can come across as masculine or feminine. For example, a parent thought that the visual style of the *Men in Nursing Together* Twitter page shown later in this section looked more masculine.

Finally, there were different opinions on the benefit of targeting men specifically through marketing communications, in addition to making sure overall marketing was directed at both men and women. Discussion about this was prompted by examples of existing communications targeting men in nursing specifically, such as *Men in Nursing Together* and *Men do Care* Twitter pages. Most male students and respondents from other sample groups preferred to see men integrated within the broader marketing for these professions, rather than have communications which were only directed at men. Reasons for this preference varied. Some male students felt male-only communications may backfire, as men might feel

²⁷ Copyright: The Royal College of Nursing.

singled out or this may only confirm that there was a problem with men in nursing. Some female respondents felt this may make them question why women were omitted from such campaigns. Stakeholders from professional bodies also stressed they wanted to attract both men and women, so could not see the value of targeting men only.



Images 11-12: Examples of men in nursing social media pages²⁸

I remember during a campaign it said girls read more books than boys, so boys should read books more. I remember the boys being instantly allergic to the library after they saw that. They just didn't want to go in. I think they thought it was almost patronizing. I don't think they liked being compared to girls in that way, so I don't think it is wise to target them specifically. [Male, GCSE, ABC1, Leeds]

However, other respondents were more understanding and supportive of male-only communications promoting careers where men have traditionally been under-represented, such as nursing. Some current male students of nursing or allied health, healthcare support workers aspiring to become nurses and some potential male students, thought it was helpful to know they could connect with other men in that profession. In particular, they felt it would be valuable to hear from other men in nursing about how they found working in a female-dominated profession, any issues they experienced and, more broadly, about their experience of nursing. A few female A level students also felt they would be understanding if they saw male-only campaigns about nursing, as they felt women had so much representation in nursing and men almost none.

I think a lot of women would understand. Obviously there is a massive disparity between how many men and how many women are in healthcare professions. I think women would understand generally why it's needed and necessary. They would probably think: 'Well, clearly there are not enough men so they are just doing it to encourage them into the profession.' Women have tons of representation we have female nurses in the media, on the TV, we have that representation, men don't. [Female, A level, ABC1, Leeds]

²⁸ Left: Men in Nursing Together (MINT) Twitter page; right: University of Dundee Men do Care campaign Twitter page.

4.3.1.3. Tapping into career motivations

Once respondents learnt more about nursing and allied health, e.g. through HEE brochures and videos such as *The Wow Show*, they were asked again to comment on these careers from a more informed point of view. A range of statements were used to prompt this discussion and help identify what, if anything, male students saw as appealing aspects of nursing and allied health professions. The statements that were used were iteratively developed based on the literature review and the early findings of what students found appealing, as well as examples of messaging used within existing marketing (e.g. phrases such as ‘making a difference’, the line from the *This is Nursing* campaign etc.). The statements used in the interviews are shown below; ‘traffic-lights’ colour-coding indicates how positive students felt about individual statements and was added for this report.

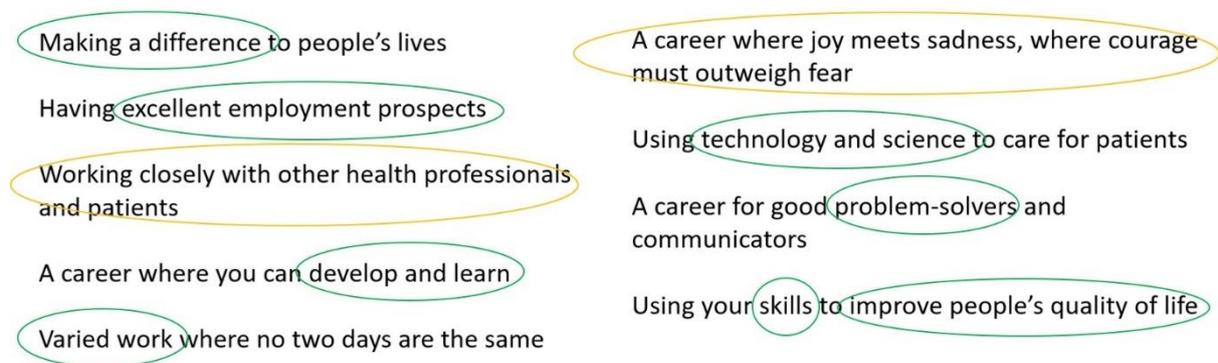


Image 13: Statements used as research stimulus in interviews

Respondents' preferences and views on different statements helped reveal some major communication themes important for appealing to potential students in general, and male students in particular. Each of these communication themes is discussed below.

Making a difference

Despite barriers to considering nursing and allied health subjects and careers, most students and parents respected and admired these professions for helping people. Positive perceptions of nursing and allied health careers, therefore, stemmed from this broad view of healthcare professions as important, worthwhile and morally commendable. For example, students and parents often described nurses as caring, compassionate, methodical, hardworking and calm under pressure, whereas paramedics were sometimes seen by male students as ‘heroes’ saving people's lives.

I feel making a difference to people's lives is very satisfactory. It probably feels so nice to get home and just feel like you've saved someone's life and using your skills to improve quality of life.' [Male, GCSE, ABC1, Hertfordshire]

Most respondents across different groups within the sample also felt that making a difference to people’s lives was by far the most attractive aspect of nursing and allied health careers. This was the case irrespective of how altruistic respondents felt in their approach to careers more generally. The ability to make a positive difference through nursing and allied health careers was felt to be attractive for several reasons. Respondents believed this would be emotionally rewarding, provide job satisfaction and help them enjoy work which they cared about. It further made nursing and allied health careers seem important, worthwhile and deserving social respect. Respondents were also attracted by the idea that they would be able to see a tangible positive impact of the skills they acquired, their work and effort. Some also felt this would make them feel positive about themselves – about what they were able to do and were doing – impacting positively on their self-esteem.

It makes me more likely to take a path in that career because you’re making a difference to people’s lives. [Male, GCSE, C2DE, Bristol]

If you’re a paramedic, the feeling of saving someone’s life must be amazing. Just knowing you’ve helped someone every day. [Male, GCSE, C2DE, Hertfordshire]

Examples of good practice: When respondents reviewed the images and marketing materials for nursing and allied health professions, most highlighted those focusing on making a difference as most appealing. Stories of individual patients and the positive changes in their lives were of particular interest; for example, a video of a prosthetics student talking about a special moment when her patient made his first steps after the amputation thanks to her. Campaign headlines that focused on making a difference also stood out to many respondents, e.g. ‘help save lives’ on a recruitment poster for mental health nursing. In particular, the headline ‘helping people to live, not exist’ was felt to convey accurately and powerfully the kind of difference made by occupational therapy (but also some other allied health professions more broadly). Respondents similarly often picked out those images that showed the positive impact on patients as appealing. The ones showing a very tangible, significant and visible change were found most inspiring, e.g. the image of a physiotherapist helping someone walk again. In addition, photos that showed patients looking happy when being supported by a health professional were also seen to convey the positive impact well.



Images 14-16: Marketing examples focusing on making a difference²⁹

'Using your skills to improve people's quality of life' [is an attractive statement] because it makes you feel better about yourself. It's like saying you aren't useless and you can make a difference to people's lives. [Male, GCSE, ABC1, Manchester]

It shows the people one step closer to being able to walk and it's because of those two people that she's able to come closer to walking. [Male, GCSE, ABC1, Manchester]

Respondents, nevertheless, varied in how much of a personal priority making a difference and helping others was to them compared to other career aspirations. For current students of nursing and allied health subjects, healthcare support workers, and potential students interested in health-related careers, this was a major if not the biggest motivation. For them, working in a job they found worthwhile and where they felt they helped people outweighed the less positive aspects, which in their view were related to income and work-life balance. Some mature male students who switched from other careers also commented how wanting to do something they felt was worthwhile and helping others was key to their decision, as they did not get that job satisfaction from their previous jobs, e.g. in sales. However, for many other potential male students this was not enough of a motivation when compared to other career considerations, such as pay or workload, to overcome the barriers they saw. Some also pointed out the failure to help others and make a difference may be as emotionally difficult as success was rewarding, making them wary of the emotional burden and responsibility of such a job.

There were variations in which specific phrases respondents felt expressed best this aspect of nursing and allied health careers, and healthcare more broadly. 'Helping others' was generally the phrase students used spontaneously when talking about attractive aspects of these careers. This was how current students and healthcare support workers talked about what attracted them to nursing and allied health careers, but also potential students interested in health-related careers.

When prompted to consider different related phrases, many felt 'helping others' and 'making a difference' were interchangeable and did not have a strong preference between the two. Some, however, preferred 'making a difference', as this was felt to be a stronger, more definitive and significant statement about a positive outcome of someone's work. Yet, others suggested 'making a difference' was not specific enough to nursing and allied health and could be applied to different professions. Instead, they thought 'using your skills to improve people's quality of life' was a more specific and relevant expression, particularly for many allied health professions. The statement was also seen to address and engage students more directly by giving more recognition to the person achieving the positive impact – through crediting you and 'your skills' for that outcome.

²⁹ Left: I see the difference prosthetics and orthotics video; middle: NHS Sussex Partnership mental health nursing recruitment campaign; right: The Royal College of Occupational Therapists homepage. Other examples of images showing a positive difference that were shared with respondents and raised interest can be found here: *Diploma in Physiotherapy*, Jornews, <https://jornews.net/diploma-in-physiotherapy-offering-a-rewarding-career-in-paramedical-field/>, Accessed 22nd October 2019; Chad2wick, L, *Healthcare providers: rekindle your passion*, <https://fprehab.com/2018/10/11/healthcare-providers-rekindle-your-passion>, Accessed 22nd October 2019.

I think 'Using your skills to improve people's quality of life' is interesting. Using the things you've learnt to help others if they need it. [Male, GCSE, C2DE, London]

While these differences of opinion were spread across male and female students, earlier discussion of barriers may suggest that male students may be more likely to be drawn to those statements that recognised their achievements more rather than focused on helping others. 'Making a difference' and 'using your skills to improve people's quality of life' may therefore be more appealing ways to convey the idea of the positive impact of these professions.

Identity – personal relevance, interests, qualities

Secondary school students' experience of their school subjects, their other interests and what they saw as their qualities and strengths, were often the only criteria they could employ to judge whether they might find a particular career suitable or not. Having had little to no experience of work, they often judged different careers on how much they fitted with who they thought they were and their identity. This wasn't specific to nursing or allied health careers, but more broadly relevant to how they thought about potential careers. A level students, therefore, particularly liked online search tools that allowed them to see a range of possible options for study and work based on their school subjects. Similarly, when potential students reviewed messaging, images and marketing materials for nursing and allied health, they looked for any signals of relevance to their interests, qualities and type of activities they liked. It would therefore be important to ensure that career tools highlighted opportunities in healthcare – including nursing and allied health – to students searching for careers related to science subjects. Such a strategy would help reach out to many male students with a background in sciences who may not see nursing and allied health careers as relevant to sciences and technology.

Seeing the relevance to the subjects they liked sometimes raised potential male students' interest in particular nursing and allied health subjects. For example, a male A level student who liked physics and enjoyed studying about radiation, wanted to find out more about diagnostic and therapeutic radiography once he considered the connection to the subject he liked. Similar comments were made by male students who liked psychology and enjoyed learning about how the human mind worked, when they could see the links to occupational therapy or mental health nursing. Current students of speech and language therapy also mentioned how their interests in linguistics and psychology were partly why they chose this career. Addressing students in relation to the subjects they liked was therefore very important in order to raise their interest in information about nursing and allied health careers.

I have always been interested in technology and science, but not biology. So if I knew other sciences were relevant to these jobs, I may have considered jobs in nursing as I really enjoy problem solving. [Male, A level, C2DE, Hertfordshire]

Examples of good practice: Students responded well to marketing examples and images where nursing or allied health careers were linked to their other interests, for example, technology, engineering and sport. The images showing the technology used within radiography and physiotherapists working with sports people often made these allied health professions seem most interesting to potential male students. Additionally, many male students were engaged by messaging, images or marketing which emphasised the problem-solving or practical character of work involved in nursing and allied health professions and the type of person who enjoyed that and had those qualities and skills, as in the examples from the *I see the difference* website below. This appealed as many male students in this sample talked about themselves as being hands-on and enjoying problem-solving and practical work.



Images 17-18: Marketing examples linking to students' skills and interests³⁰

Just physiotherapy really [is interesting]. I want to be someone who runs out to the footballer when they get injured and I really enjoy sports. [Male, GCSE, ABC1, Manchester]

I would look for the actual technology and using your hands as something that would draw me in and catch my eye because I personally find technology very interesting. Being able to use it to help people is something I would find very enjoyable. [Male, A level, C2DE, London]

Marketing examples, messaging and images shared with students, such as the ones shown above, often referenced these personal qualities and where relevant emphasised the links to interests such as technology. However, there may be greater scope to link careers to subjects, as students were keen to understand this. For example, some male students

³⁰ *I see the difference* prosthetics and orthotics pages.

suggested they should be told 'If you enjoy physics / biology / psychology etc., here's why this subject might be for you' or 'here are the different subjects that may be good for you'.

Variety

Enjoying work was high on the list of priorities of male and female potential students alike. Male students, in particular, often feared they might end up 'stuck' in routine, boring work. Variety of work was, therefore, highly valued as students hoped this would keep them interested over time. Variety of work also raised interest in professions which could credibly show they offered this. When male students were asked to highlight most appealing aspects of nursing and allied health careers, variety consistently came up as one of the key priorities. Similarly, marketing materials that suggested variety of work were noticed and received well, as the introduction to orthoptics below demonstrates. However, across the different images and marketing examples shown to respondents, variety was not sufficiently emphasized given the importance to potential students thinking about their future work.

The varied work as well would be something I look for because the last thing I want to be is be stuck in an office just typing things out all day long. [Male, A level, C2DE, London]

Become an orthoptist

Double vision is stopping one patient from driving, working, even making a cup of tea. A baby is born with a cataract that could affect their vision for life if no one diagnoses it in time. Another young patient has one eye that turns, affecting both their vision and the way the other children treat them at school.

As an orthoptist, you could help them all.

Image 19: Introduction to orthoptics³¹

Current students of nursing and allied health also emphasised the importance of showing variety, in terms of the patients they could work with, different settings, health areas and types of activities. For example, students of speech and language therapy stressed the importance of showing both children and older patients and different types of problems they help with, as well as the technology they can use. Students of mental health nursing commented how images they were shown as research stimulus did not capture the diversity of settings and activities involved in their career and similar comments were made by an occupational therapy student who felt the variety of settings, people and problems they helped with was not sufficiently shown.

³¹ I see the difference orthoptics page.

I don't think that it [marketing examples] necessarily shows the variety of places where you can work and also different activities in mental health nursing. [Male, current student, mental health nursing]

Excellent employment prospects

All of the big themes above were centred around the criteria rooted in students' aspirations in terms of emotional benefits of work and which students employed when considering careers – how enjoyable, interesting or meaningful they were. Measured by the more pragmatic criteria, for example the balance between pay and workload, nursing and allied health careers were often assumed to be less appealing. However, excellent employment prospects for graduates of nursing and allied health subjects were appreciated. This was the key aspect of these careers that appealed to the more pragmatic interests of students.

I think for me personally the most important thing is the excellent employment prospects. [...] Personally I'd want to climb that ladder and keep going further and further. I'd want to choose a career that I could go further, that I would reach a potential. [Male, A level, ABC1, London]

Students were attentive to messaging about this and noticed when information about employment prospects was included in marketing materials, as in the example below. Many students who were in the process of choosing subjects that might influence their future employment prospects – e.g. choosing university or college vocational subjects or apprenticeships – were keen to make a choice that would lead them to employment. Information about employment prospects in nursing and allied health was taken as credible and appealing. Students and parents trusted this as they had a general awareness that healthcare professionals were needed and could find work in most places in the country or abroad.

Example of good practice: Highlighting good employment prospects in nursing.



Image 20: Detail from nursing careers infographic³²

³² Health Careers, General Practice Nursing Infographic.

It's good that they've put the pay on there because if you're looking for a potential career, the things that you're looking at is money, how much can I get, and what benefits are there. If it's showing all the benefits, I'd say that's the best they can do [to promote those careers]. [Male, A level, ABC1, Manchester]

Interestingly, some other ways to talk about excellent employment prospects turned to be potentially controversial. For example, students sometimes had mixed feelings about this information when it talked about the demand for health professionals. As some pointed out, this may be seen as good as it would help them secure work, but it also made them think of understaffed hospitals, high pressure and the workload of nurses, doctors and other healthcare professionals. Demand for healthcare professionals therefore did not suggest only positive employment outcomes but had more negative associations too.

Themes with more mixed appeal

The remaining statements that were tested with respondents centred around other aspects of nursing and allied health careers that were sometimes highlighted in marketing and may be appealing to some potential students. These themes concerned:

- Emotional intensity of working in some healthcare careers (e.g. 'where joy meets sadness' from *This is Nursing* campaign);
- Heroic aspects of healthcare work (e.g. 'where courage must outweigh fear' from the same campaign);
- Social relationships when working in healthcare (e.g. 'working closely with other health professionals and patients').

The description of nursing as a career 'where joy meets sadness' often raised mixed feelings from both male and female potential students and their parents. Male students, in particular, often took this as a confirmation of their concerns of the emotional burden of working in a career such as nursing, but also healthcare in general. Some female students also wondered whether such a statement may scare potential students, although most did not think it would deter them if they were interested in nursing. The question of whether such a statement may put off potential students was sometimes also raised by current students of nursing and allied health and healthcare support workers. At the same time, across these different groups of respondents, many also felt this statement captured the reality of working in nursing and therefore was good as it reflected that career. Ultimately, the statement appeared to have an opposite impact on different people – confirming worries of some potential male students and appealing to others through offering what came across as an honest and true account of what it may feel like when working in healthcare.

No one really wants sadness. It sounds it's inevitable, eventually you will encounter sadness, but no one really wants to hear about it. No one wants to think about it before going into a job. [Male, A level, ABC1, Hertfordshire]

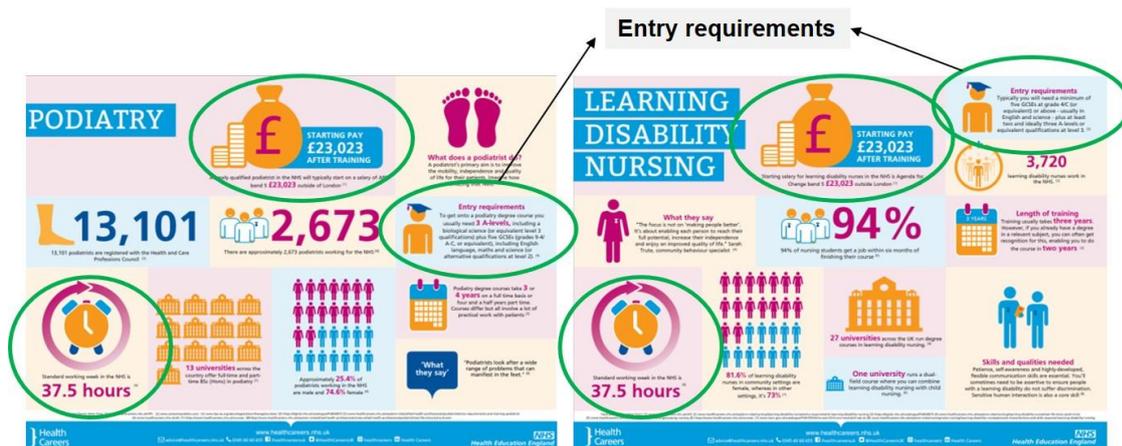
The response was somewhat similar to the other part of the *This is Nursing* statement, 'where courage must outweigh fear'. Potential students and parents wondered if this may scare students. It further reinforced the barrier some male students had for considering healthcare in general, which centred around not wanting to have huge responsibility. The statement was also sometimes perceived as unclear, for example, some current students and healthcare support workers wondered what they were meant to be afraid of. Some students of allied health subjects such as physiotherapy, podiatry or speech and language therapy also pointed out the themes of courage and fear did not feel relevant to their careers.

Finally, the statement that focused more on the social relationships aspect of working in nursing and allied health careers had some appeal but not as much as the core themes discussed before. The teamwork aspect of these careers appealed, although for students with no experience of work this often felt abstract. Interaction with patients was one of major motivations current students had for wanting to work in these careers, but potential male students sometimes had more mixed feelings about this. While some liked the idea of being able to interact with different people, others wondered if this might be stressful too. Parents sometimes also commented how they weren't sure whether their sons might be stressed about communicating with patients and worry if what they said or did was right. For these reasons, the theme of interaction with patients is an important benefit to highlight for many already interested in healthcare, but may be more daunting for some younger potential male students.

4.3.1.4. Assuaging concerns

Information related to the more pragmatic career considerations, such as pay or workload, often had a more immediate draw for many potential male students. When they went through the information about nursing and allied health careers, they looked for this information first. In addition, male students engaged with this information against the backdrop of their assumptions about these careers. As they read through, they looked for information that would test, confirm or revise their assumptions.

For example, when they reviewed Health Education England's infographic pages about various nursing and allied health careers, some of which are shown below, information about pay, work hours and entry requirements was often the first they looked at and which interested them. Some of the information presented they found surprising and reassuring, with many commenting that the starting pay was more adequate than they had thought and that the work hours seemed more reasonable than they had assumed. This opened up some male students to considering the accuracy of their ideas about the pay and work hours in nursing and allied health careers. However, it still left some residue of doubt about whether work hours were longer in reality than shown in this information. Parents often had a similar response to this information, being pleasantly surprised that the starting pay and hours may be better than they had thought but to some extent also doubting it.



Images 21-22: Examples of health careers infographics³³

The mental health nursing infographic stands out because it's got money on it. The starting pay seems alright. [Male, GCSE, ABC1, Manchester]

The key to assuaging concerns over pay were questions of career progression, for both potential male students and parents. Many male students aspired to be able to progress and increase their pay in this way. Therefore, they felt that information about the starting pay was not sufficient to reassure them about the income in nursing or allied health. Many wanted to know what they could be earning if they progressed in these careers. In addition, some parents also stressed even this information would not be sufficient, as they wanted to know how many opportunities for progression there were. In other words, they wanted to know whether only a small percentage of staff progressed to higher levels or there were many opportunities for this and how long this took.

The starting pay isn't bad but how much can you earn if you progress? And I'd want to know how many of them can progress. Is it just a few and everyone else stays the same? [Dad, son doing A levels, London]

Issues around pay and career progression were important to current male students of nursing and allied health, as well as healthcare support workers. Most acknowledged and were clear that their main motivations to go into these careers were altruistic, rather than linked to pay. While many felt reconciled with this, some pointed out that pay even for senior professionals did not compare favourably to many other sectors. For example, a student of occupational therapy believed that the most he could earn in this profession was circa £40,000, which he felt was lower than in many other sectors.

Many potential male students also noticed and responded well to the information that afforded more professional status to nurses and allied health professionals in their view. Specifically, learning that there were many different specialisms within nursing and allied health increased the perceived status of these professions for respondents. Potential male students, in particular, were reassured to see there were different specialisms within nursing. This suggested to them there were opportunities to specialise in specific areas of

³³ Health Careers, Podiatry and Learning Disability Nursing infographics.

nursing, rather than only do 'general nursing' which they equated with personal care for patients. Being a specialist also was seen to afford more status within the medical hierarchy, which addressed to some extent some students' concerns over the lower status of nursing and allied health when compared to medicine. Messages highlighting skills, training, autonomy and opportunities for career progression further countered the initial concerns over the status of these careers.

It shows there are quite a lot of opportunities like working their way up the career ladder or going into different specialised areas that I didn't know existed. [Male, A level, ABC1, Bristol]

It is a career where you can develop and learn and climb up the ladder and specialise. [Dad, son doing GCSEs, C2DE, Manchester]

4.3.1.5. Other considerations: comprehension, accuracy, tone and style

Respondents also expressed views with regards to certain other aspects of communications about nursing and allied health careers in response to the materials shared with them. Their comments ranged from issues with clarity and comprehension, to suggestions regarding accuracy, tone and style of different forms of communications.

Clarity was raised as an issue both in the context of images and language used in certain examples. For example, respondents sometimes found certain images unclear where they could not see or understand what the health professionals shown in them were doing. These images were, therefore, singled out as less engaging. Comprehension was also raised as an issue where the language used included technical terms respondents didn't understand. For example, GCSE and A level students found it difficult to engage with a male nurse talking about his career progression as they didn't understand some of the terminology he used, e.g. technical job titles for all the different positions he held.

The mental health nursing [left image] isn't as good because it just looks like someone just sitting there. It's not got any actions so it's not clear what's going on. [Male, GCSE, ABC1, Manchester]

Additionally, current students sometimes considered the accuracy of images, e.g. whether the correct uniforms or technology was being shown, suggesting photos may be scrutinised in this respect by those studying and working in these fields.

Potential students, parents, teachers and career advisors raised the issue of tone or mood of different examples of imagery or marketing. As mentioned, images showing positive outcomes for patients were felt to be uplifting and appealing. Conversely, where the situation shown or visual style suggested the challenging realities of working in healthcare, respondents sometimes questioned whether this might be off-putting to potential students. For example, showing images of care for very ill patients or using dark colours and backgrounds, as in the examples below, was questioned in this respect.



Images 23-24: Examples of scenes or style that suggest challenges of working in healthcare³⁴

One thing that surprised me is the black background on that [mental health recruitment] poster. Especially if it's to do with mental health, I don't think necessarily the colour black, because people assume that's something negative. [Male, A level, ABC1, London]

At the same time, potential students yearned to be shown the true and honest reality of different careers so they could get a better sense of whether they might suit them. For this and stylistic reasons many students enjoyed the naturalistic, documentary style of the *We are the NHS* nursing advert. Some also praised reality TV programmes about healthcare as an engaging way to find out about these professions. When male students reviewed examples of videos about nursing and allied health, some also suggested they would prefer documentary style videos, e.g. 'a day in the life of a therapeutic radiographer', to case studies where students or professionals just talked about what they did. This preference for a documentary style approach was both because it was perceived as more engaging and also because it allowed potential students to see what the work involved rather than be told.

[We are the NHS nursing advert comment] It's showing real life stuff and shows how people in the NHS do these things and makes a difference between people living and dying. It makes it seem real. [Male, GCSE, ABC1, Manchester]

4.3.1.6. Formats and channels

Overall, more visual, narrative or interactive formats held more appeal for potential male students to engage with communications about nursing and allied health careers. More text-based marketing materials, such as the Health Education England's brochures, were found useful for giving a broad picture at a glance. However, photos and videos were often seen to give more of a sense of the work involved and be more engaging. Visual

³⁴ Left: The University of Hertfordshire adult nursing MSc webpage; right: NHS Sussex Partnership mental health nursing recruitment campaign

presentation of information, as in the examples of infographics shown to respondents, was also appreciated as easy and quick to grasp. Within this, a bold, visual presentation of key statistics effectively drew students' attention and interest.

Infographics was best because it easy to read. This gives statistics, pay, skills and qualities all involved within the job clearly. [Male, GCSE, ABC1, Manchester]

In addition, students often felt stories would be a good way to interest them in these careers. For example, some suggested telling stories about patients and what difference a health professional made to them. Others suggested stories showing a day in the life of a male nurse or allied health professional. Narrative forms such as medical TV dramas and reality programmes, as well as children's programmes with doctors, were also seen as an important platform for changing perceptions and raising awareness of men in these careers, as well as allied health professions more generally.

Example of good practice: *24 hours in A&E* was sometimes mentioned by potential male students as an example of a TV programme that raised awareness of certain healthcare professions in an engaging format. A stakeholder interviewed for this research also commented how this programme prompted some students to apply to paramedic science. This and similar programmes present an opportunity to include a wider range of healthcare professions and showcase men working in them.

People in these jobs have their journeys and their stories, and I think that works well for me, I like to see where people have come from and where they end up.' [Male, GCSE, C2DE, Midlands]

Interactive formats were also suggested, ranging from websites, apps and computer games to workshops with health professionals in schools. When respondents reviewed the websites such as *I see the difference* and the page *Want to know about nursing?*, they appreciated having a mix of information, video testimonials, as well as tools such as course finder. Some male students suggested computer games might be a good way to introduce these careers to younger students in primary schools and cited examples of similar games for other professions, e.g. vets. Some parents also suggested schools could introduce students to an app providing information about these careers or careers in health more broadly. Students also liked the idea of workshops with health professionals with an interactive element where they would get to do things and ask questions. This is discussed in more detail in the next section.

It could even be a school-based thing, such as science-related so they are allowed to use their phones or iPad to be able to engage with an app or games to let them learn more about it. [Female, son doing GCSEs, C2DE, Midlands]

Many male students, however, stressed that the main challenge would be how potential male students would be led to access this content in the first place, given that many would

not be looking for it and think they were not interested. For example, students struggled to see how and why they would ever come to view a YouTube video about a male nurse or a dedicated website promoting allied health professions such as *I see the difference*. Some also pointed out that YouTube and other social media platforms would not be suggesting this content to you unless you already looked for similar content.

Students thought that schools, particular social media platforms and university-related websites may be the best ‘touch-points’ for their initial exposure to ‘hooks’ that might get them to view further, more in-depth content. Schools and websites such as UCAS, StudentRoom and Unifrog, along with individual university websites, were already places where at least A level and BTEC students considered their future study and career choices. As such, they were seen as good places for information or adverts that would prompt potential male students to access further online content.

If you're on UCAS and [similar websites], you're in the environment where you're looking for what you want to do, so it would be useful to have it there. If you're on there, you're in a situation where you're picking a career. [Male, A level, C2DE, Leeds]

There were mixed views with regards to the prospect of effectively prompting students to access online content through adverts, videos or stories on social media. Some potential male students suggested news feeds on social media, e.g. on Snapchat, could be used to post videos or adverts that may engage male students to look further. Others, especially some GCSE male students, pointed out they would be unlikely to access career content through social media. For example, a student explained how he would only ever look at music or silly videos on Instagram. Yet, parents strongly felt that social media and particularly YouTube were important for engaging their sons given the time they spent on there.

On Snapchat, if you swipe right, there's a news section. I always end up on it looking at random stories just by accident, but if something sticks out to me I will read through it all. You could have a nursing section and if they had real-life nurses showing you a day in their life and you do a story on that, you would probably end up watching it. I've watched so much weird stuff just because I've been bored. [Male, A level, ABC1, Birmingham]

→ Implications for marketing nursing and allied health subjects and careers: Based on the findings on marketing requirements discussed in this section, the following actions are recommended to ensure gender-sensitive marketing and appeal to male students.

Action by: All those involved in providing information, career advice and marketing of nursing and allied health subjects and careers, including university and colleges, professional and health sector bodies, healthcare employers and career advice providers

Recommendation 1: Ensure career information, marketing and outreach content promotes nursing and allied health careers in ways that appeal to both genders:

- Remove any messages, language or imagery that may reinforce cultural stereotypes of nursing and caring professions as female careers;
- Adapt content to emphasize clinical competencies and skills in these careers alongside caring aspects and highlight relevance to sciences, technology, problem-solving and ‘hands-on’ work to match potential male students’ interests, perceived qualities, skills and career motivations;
- Highlight career progression, specialisation and pay opportunities to overcome concerns over status and pay;
- Ensure male students and professionals are as visible as females in marketing and outreach materials and events, wherever possible;
- Disseminate these recommendations to all those marketing nursing and allied health, for example as a toolkit that could include guidance, checklists and examples of good practice.

Action by: Professional and health sector bodies

Recommendation 7: Promote the core messages that ‘healthcare careers are about skills, not gender’ and that ‘there is a huge range of careers in healthcare’ to children and students throughout different stages of education, starting from primary school:

- Raising the profile of nursing and allied health careers by emphasizing the academic, skilled and specialist nature of these careers, as well as variety of opportunities will be attractive to male and female students and influencers.

Recommendation 10: Promote allied health careers together:

- Strengthen partnerships between different allied health professional bodies to highlight the diversity of opportunities, as well as maximise the reach of allied health marketing.

Note: Other recommendations relevant to the findings covered in section 4.3 about marketing include: 2, 5, 14 and 22 (see Section 6 for all recommendations). However, these recommendations are included in section 4.4 as they are more closely linked to findings around interventions in education, healthcare, media and policy discussed in 4.4.

4.3.2. Interventions to increase male participation

Starting from the strategies identified through the literature review, the qualitative research explored what interventions and actions within the education, healthcare and media may help attract more male students to nursing and allied health subjects and careers. For example, students' preferences for different types of outreach activity were explored, as well as the role schools, universities and colleges, healthcare employers, wider policy and the media could play in increasing male participation in these subjects. The section below details findings in this area, but does not discuss content considerations which is covered in the previous section about marketing. Also, as the theme of providing visible male role models for nursing and allied health is relevant across the board, it is discussed throughout the section where relevant rather than as a separate topic. Specific recommendations for interventions by schools, universities and colleges, healthcare employers and other relevant organisations are included where most appropriate in this section.³⁵

4.3.2.1. School career advice and outreach

School outreach was considered critical for raising awareness of nursing and allied health careers by potential students, parents and also many current students. There was also a lot of appetite for more and better career advice among students, including for more promotion of healthcare careers. Yet, students' needs and requirements from school career advice were set against a context of extremely patchy provision which varied hugely between different schools. At one end of the spectrum, students received a single career advice session when choosing their A Level or BTEC subjects. At the other end, a career advisor from a Bristol state secondary school reported how their school had three members of staff working on careers provision, establishing pathways, events and partnerships through which students were informed about a range of careers. In addition, many teachers, career advisors and parents also felt that healthcare careers were not promoted as much as some other careers at schools, e.g. engineering, accountancy or finance.

There could be more information at school via career evenings. There was nothing about nursing. [Mum, son doing GCSEs, ABC1, Leeds]

Some other challenges to meeting students' career advice needs better were also raised. As mentioned before, many students felt the career advice they received at their school was often narrowly driven by a focus on grades. Students often felt that career advisors' aim was to ensure they picked those subjects where they would get good grades. Instead, students wanted career advisors to introduce them to a wider range of potential careers based on their interests, qualities and subjects. Some suggested schools could also integrate more career information and advice within their PSHE lessons.

³⁵ Note that recommendations for the same organisation or type of organisation can be split in different sections as they are organised thematically, rather than by organisation as in section 6 that brings all recommendations together.

[You could do it] in a designated period, maybe once every 2 weeks, where you just go through all the work options that you could do in the future. It could be like what we do in PSHE learning about social issues. That could also be accompanied by learning about different career paths. [Male, GCSE, ABC1, Leeds]

In addition, students were very keen to understand how the subjects and what they studied linked to employment and careers. Rare examples where teachers acted as ambassadors for particular careers and linked them to the curriculum suggested that this was often effective in raising students' interest in particular careers. Teachers in this sample recognised the benefit of doing this, but unless they had an additional career advice role at their school, they were rarely proactive but rather responded to students' requests for information. Career advisors also commented how teachers were often too busy to be able to link curriculum topics to career advice. Even the advisor who described a fairly comprehensive offer at their school acknowledged that this was one area where they were weak and needed improvement.

In biology in our school we had a bit where we learnt about lungs and a heart and looked at dissecting and at that point you could talk about how that's what you do in surgery and link it more towards jobs. [Male, GCSE, ABC1, Manchester]

Example of good practice: A male A level student applying to medicine recalled how his interest was reinforced by a medicine-focused school club. The club called Scrubs was run by a biology teacher with an interest in healthcare. Students met weekly with the teacher who introduced them to different themes in relation to medicine and sometimes also organised talks from external visitors, as well as visits to university medicine departments.

Timing career advice was another area of consideration that was often discussed and had its own challenges. Most students, teachers, parents and career advisors alike suggested some key stages when nursing and allied health careers should be promoted to raise awareness and attract potential students. Many stressed the importance of starting early with primary school children because they recognised that this was when gender stereotypes about nurses as female and doctors as male were formed, as well as a very narrow view of healthcare professions as being limited to doctors, nurses and possibly surgeons. Respondents also stressed the key further moments to promote these careers were when students considered their GCSE, A level, BTEC, or university choices.

However, there was a paradox at the heart of these suggestions for timing. The younger the students were the less urgent it was felt to engage with careers, but the older they were the more fixed they were in their ideas about what they liked and didn't like. In other words, by the time male students were more engaged with careers it was often too late to interest them in nursing or allied health, but when they were still more open, they were less interested in careers in general. These challenges of timing would need to be considered when tailoring outreach approaches to different age groups, e.g. focusing on some broad core messages with younger age groups and more interactive, engaging methods.

It needs to be maintained – you can't just mention it once. Drip through information, maybe at school assemblies. [Male, GCSE, ABC1, Hertfordshire]

Certain other preferences consistently emerged in terms of what students wanted from career outreach sessions and events. As students had little means of knowing whether a particular kind of work would suit them or not, they were most interested in others' experience of work or study subjects. Learning about other people's experience was treated almost as a proxy for seeing it for themselves, which they could only directly achieve through work experience or shadowing where opportunities were very limited.

For this reason, students were typically keen on career sessions run by external visitors who were either university students or professionals in a particular field. Students also trusted other students or professionals to tell them both the positives and negatives of particular subjects or careers. Within this, age and gender of speakers were recognised as potentially important. Students were often most keen to hear from people similar to them, e.g. their peers who are just a couple of years older and therefore have similar but more experience. Where careers were perceived as female-dominated, as with nursing in particular, the presence of male professionals at outreach sessions was seen as critical for sending a signal to male students that these careers were for them too.

It [work experience] would help with more understanding of how it's going to feel and what you are going to do if you leave school or college. [Male, GCSE, ABC1, Manchester]

To help them experience particular careers even more, students also preferred workshop formats of outreach sessions which included interactive elements and allowed them to try out certain tasks. Some also noted interactive sessions were by far the most engaging and memorable. Other suggestions for how to convey the 'reality' of certain careers were to tell 'real stories'. In the case of nursing and allied health, students wanted to hear stories about how health professionals got into those careers, 'a day in the life of a particular health professional', and examples of how they made a positive difference to patients' lives. In addition, there was often a preference for smaller group sessions – the numbers suggested ranged anywhere between 10 and 30 people – where students would feel less intimidated about asking questions and be more likely to engage than in an assembly.

They should be interactive and get people involved. If it's just you sitting there for 30 minutes with someone talking at you, you aren't going to pay much attention. If you make it more interactive, asking for people's opinions and things like that I think it would help. [Male, GCSE, ABC1, Manchester]

Example of good practice: A university outreach officer involved in promoting orthoptics highlighted the importance of using interactive elements to engage students. The respondent cited an example of using glasses that simulate double vision to engage students:

I have glasses that simulate different eye conditions and students have to match what is on the worksheet. Then I also have other ones that induce double vision and students need to complete everyday tasks like pouring water and ring hoops...to show how difficult life is with double vision or vision impairment.

An interactive element is the first thing I will do. If I stand there and hand out pens and leaflets, they won't engage as much as trying things on. Students will grab what they want and leave. We need to be able to chat with them.

While they are engaged in the activities, I can speak to their parents and friends and get them to think about the area. [University outreach staff]

Mentoring was sometimes suggested as another way for students to learn from others' experiences of a particular subject or career. For example, a male student mentioned how his school set up a mentoring programme where 6th form students mentored younger students. The respondent suggested this kind of mentoring could be used to promote healthcare careers to boys, for example, 6th form male students interested in healthcare could mentor younger male students and introduce them to these careers. In addition, there was some interest in being able to ask questions from university students but students were less sure how this would work. Some suggested universities could set up online pages where male students of nursing and allied health could answer questions. Others pointed out there may be safeguarding constraints in asking secondary school students to liaise online with people they didn't know. But overall, there was interest in mentoring and students generally thought that would be an interesting and useful way to find out about careers.

In 6th form, you can be a mentor for younger students, so maybe somebody interested in healthcare could speak to younger students? [Male, GCSE, ABC1, Hertfordshire]

Some other types of career events at schools drew more mixed comments, specifically career fairs. Where career interests were seen as more of an urgent concern – from Year 11 onwards – fairs were seen as a useful way to get information about diverse careers. For example, students appreciated where people running the stands were approachable so they could discuss different careers, as well as sign up to receive more information or get instructed about where they could get more information. Parents also found them a useful prompt to discuss different careers with their children and find information themselves. Parents were also interested in any collateral material that could be provided at these events – and as part of career advice at schools more broadly – that could help signpost them to further sources of information they could use with their children.

However, some younger students felt less engaged by career fairs and compared them unfavourably to outreach sessions with professionals from different fields. While workshops were seen as potentially offering an honest insight into the 'reality' of someone's work, career fairs were sometimes perceived as propaganda where different employers were 'selling these careers' to students.

My school organised careers fairs sometimes, but I can remember everyone taking the mick just a little bit. I feel almost worried for the nurses because they were bullied a little bit by the students. I think it was when they saw that Morrison's was there they thought that was funny and just the fact that Morrison's was there sent everyone over the edge. [Male, GCSE, ABC1, Leeds]

There are loads of different sessions and different people from companies come in and speak to you about what they do and what they offer or like paths you can go down. [Female, A level, ABC1, Bristol]

Teachers and career advisors also made suggestions for what could help promote nursing and allied health careers – and healthcare more broadly – in their schools. A few mentioned recent developments that made them think schools would be expected to improve career advice provision. For example, a career advisor mentioned their school was working to meet Gatsby benchmarks for career advice, but that other schools may have to do the same as Ofsted now placed more importance on career advice when inspecting schools. This career advisor thought such development could also be used to push for more promotion of healthcare careers in schools. For example, schools may be incentivised to do this if this helped them demonstrate adequate career advice provision. A teacher further mentioned how teacher training now covered topics such as linking career information to subjects. The teacher suggested sessions on how to do this for nursing and allied health could be incorporated in the regular training teachers receive at work. Additionally, some career advisors wanted to collaborate with local healthcare employers to promote these careers to their students, as well as to potentially secure work experience placements. However, respondents felt that local healthcare employers were not as proactive in career outreach, as other local companies and organisations.

There is a big range in what career advice schools provide. We are just fortunate that our head teacher wants to invest in this kind of thing. If you're going to be getting your Gatsby benchmarks – which you should for OFSTED – you should be providing this kind of careers advice, but you have to spend your money. Some schools do just buy independent advice in and they might have one independent careers session, that might be what they do. In our school, we very much have a careers journey, so it's very embedded. We have two careers advisors, we have an enterprise advisor, and we have a head teacher that champions it, so that's why it's different. [Career advisor, Bristol secondary school]

Finally, a couple of stakeholders raised the question of the impact of school outreach on solving the pressing recruitment challenges for some nursing and allied health professions. While they recognised the importance of school outreach for long-term recruitment into these subjects and careers, they questioned whether and how this impact would be evaluated. Respondents further suggested such long-term investment may not help with the immediate recruitment needs, whereas there may be some 'quicker wins' that deserved as

much focus as school outreach. Specifically, these stakeholders suggested that supporting mature students to enter nursing and allied health study and careers may be a more effective solution to the present recruitment needs.

The challenge of nurses in particular [...] is that they tend to be of a mature background. When you look at recruitment, one of the things we have to shift universities from thinking is [that they need] to do more school events and open days. It might not be appropriate for the target group [of potential students of nursing]. This may not be where they look for the types of people that will go for these courses.
[Stakeholder]

→ **Implications for school career advice and outreach: Following on from the findings on requirements from school career advice and outreach, the actions below are recommended to help ensure students of both genders are introduced to opportunities in nursing and allied health careers.³⁶**

Action by: Schools and career advice providers

Recommendation 11: Ensure information about nursing and allied health careers is provided to all male and female students whose subjects, interests and perceived qualities are relevant to these careers:

- Provide students with information on how these careers relate to a wide range of subjects, including biology, physics, psychology, linguistics, PE etc. and signpost interested students to further resources on these careers;
- Ensure different routes to nursing and allied health careers are explained to students, including apprenticeship-based routes in line with the Baker clause.

Recommendation 12: Establish partnerships with local health employers, universities and colleges to provide career advice about nursing and allied health subjects, mentorship and work-shadowing opportunities:

- This aligns with recommendation 3 of the NHS Staff and Learners' Mental Wellbeing Report (HEE, 2019) recommendations.

³⁶ The Baker clause referenced in Recommendation 11 was introduced in 2017 as an amendment to the Technical and Further Education Act 2017. It requires schools to allow colleges and training providers access to students in years 8-11 to provide information about non-academic routes available to them.

Action by: Professional and health sector bodies

Recommendation 8: Support schools to meet Gatsby benchmarks in providing career advice on nursing and allied health professions:

- Produce resources teachers and career advisors can use and adapt to different formats of career advice and events;
- Ensure nursing and allied health career information are built into teacher and career advisor training to build their capacity to promote these careers;
- Ensure outreach sessions meet students' preferences in terms of the formats e.g. use interactive workshops, story-telling, documentary style videos to engage potential students.

Note: Other recommendations relevant to the findings covered in section 4.3.2.1 about school career advice and outreach include: 1, 5, 7, 13, 18 and 22 (see Section 6 for all recommendations)

4.3.2.2. Universities and colleges

The research also explored students' experiences and needs from university and college marketing and admissions events and processes, as well as their views on how these could be used to promote nursing and healthcare careers.

Most A level students in this sample had the experience of attending university open days and taster lectures to help them choose a course and a university. Students typically found these events very useful for getting a sense of what a particular course or career may be like and helping them choose. However, students felt some of these events did little to raise their awareness beyond the courses and careers they already knew about. Respondents pointed out how open days often had to be booked for a particular subject so they had no opportunity there to learn about other potentially relevant subjects to them.

Conversely, where students attended open days which were set up as fairs, they enjoyed being able to look at more than one subject and career and potentially find out about something new that would interest them. The open days fair format was particularly preferred by those students who were still trying to decide between different options, although admittedly they were felt to be too late to learn about new options for those who had already decided on the subject they wanted. Given the low awareness of allied health careers and different options within nursing, some students thought university open days could be used to raise awareness of these subjects if they were organised to allow for learning about more than one subject.

With universities, you only go to the open days that you want to go to. If you didn't think about going into nursing, you're not going to go to one. [Male, A level, ABC1, Leeds]

Similar issues were discussed with regards to foundation students on access health and care courses. Some admissions tutors for foundation courses reported how many foundation students often came with fixed ideas about which course they wanted to enrol for after their access year. However, others explained how there was still some movement in students' ambitions and choices, for example, some realised during that year that they were better suited to a different healthcare career than the one they originally wanted. Admissions tutor respondents stressed the importance of introducing foundation students to all the different subjects they could progress to after their foundation year to ensure students could make informed choices and raise awareness of different opportunities.

Example of good practice: An admissions tutor for health and care foundation students explained they worked in partnership with their local university to organise healthcare departments' visits and talks that would raise awareness of different subjects students could progress to, including a range of nursing and allied health subjects.

We talk about the 11 different [course/subject] options available [to foundation students] and the entry requirements and deadline for the entry requirements. We also get the course leads to speak about the course and the profession and I think that is very important. [Admissions tutor for foundation students]

The challenge with promoting nursing and allied health courses to male foundation students was that they were often set on a few subject options with higher proportion of men, e.g. physiotherapy, paramedic science, diagnostic radiography, and it was difficult to interest them in other options. This was evident in the subject choices of some of the foundation students in this sample, e.g. diagnostic radiography or sports rehabilitation study. It was also reported by the admission tutors for foundation students, some of whom felt the perception of nursing as a female profession was further reinforced by male students seeing mainly female students choosing it as an option.

The exceptions to these trends were those male foundation students who decided to go into nursing due to life experiences, e.g. physical or mental health problems, and/or role models in nursing, e.g. close family members working in this profession. Foundation students' subject choices and factors influencing them underlined yet again the importance of providing male role models in nursing and across allied health to men interested in healthcare. Existing mentoring systems within colleges and universities could be used to provide such role models and reassure potential male students that female-dominated nursing and allied health subjects were open to men.

I was in the royal marines and got a knee injury which required physio to get me through it. This opened my eyes to things outside the corps. I have always been interested in anatomy and physiology. Nothing better than helping other people, you can feel a lot of happiness doing that. That was the beginning of the journey. Because of my sporting background they suggested sports rehab, which I'm excited to do, but I want to do physio after and help around the ward. [Male foundation student]

Recruitment and admissions experiences sometimes also influenced students' perceptions of gender make-up of the workforce and could influence how interested they were in particular careers. For example, a female student reported how her brother attended a university open day where he was one of four male students. In her view, this put him off as he felt uncomfortable in such an environment where he was one of very few men. Similarly, some students felt it was important to avoid such situations at interviews, either having a single man in a room of female candidates or having an overwhelmingly female or male interview panel.

These considerations suggest it may be important for universities to explore possible solutions to overcome such feelings of being out of place in a female-dominated environment. For example, scheduling interviews so men are not in a small minority or potentially organising open days for more than one subject including those with higher proportion of men. University admissions tutors interviewed for this research, however, were not aware that this was considered when organising interviews or open days at their universities.

My brother applied for something and went to an open day and it was all women there and only four lads and that really put him off it. I think it made him feel uncomfortable and I think people tend to gravitate to their own genders. He just felt really out of place. [Female, A level, ABC1, Leeds]

Some other forms of university support for potential students, such as summer schools, drew mixed interest and responses. Many male and female students alike felt summer schools would require a big commitment and students would not want to sacrifice their summer holiday for this, unless they were already very committed to study a particular subject. In other words, they did not see it as a viable way to expand a pool of interested candidates, but potentially to reinforce interest and help with applications for those already interested. Parents expressed similar concerns, e.g. how this could interfere with family holidays.

However, a couple of male A level students wanting to study medicine were attending summer courses to help prepare their application. Although they were very much set on medicine, they were still open to learning about other healthcare subject options, so such courses for more committed students could be used as a further opportunity to increase their awareness of nursing and allied health.

Summer school – it's in the summer, it's not realistic. [M, GCSE, C2DE, Midlands]

I think it is unrealistic. Two weeks is a big ask and families will be going on holidays. [Female, son doing A levels and CTEC, C2DE, London]

I had to write an essay to access this programme to help you to apply to the university. It is all in the summer. You basically get different tasks, you have to attend these compulsory meetings and earn points to complete the access programme. It helps you with the application. [Male, A level student applying to medicine, ABC1, Manchester]

Admissions staff interviewed for this research were broadly committed to increasing male participation in healthcare careers. However, their universities did not have any specific targets or initiatives that would give structure and drive these ambitions. Admissions tutors typically commented their marketing sought to include images of male students and professionals and address both genders. In one case, an admissions tutor said they decided to review and change their marketing materials to include more images of men. Others commented that they encouraged male students and professionals to be involved in outreach and marketing events. But these efforts were often ad hoc rather than part of a broader strategy for increasing male participation in healthcare courses. To remedy this situation, some of the stakeholders suggested universities could be encouraged to treat this issue as part of their widening participation efforts and/or gender equality commitments, for example, as part of meeting criteria for Athena SWAN awards.

Interviews with stakeholders also suggested that further co-ordination and support may be needed to assist different activities aimed at increasing male participation in nursing and allied health. Different stakeholders mentioned different examples of projects aimed at increasing male participation in nursing and allied health. The examples mentioned included: the recent Nursing Now global campaign that included a strand looking at male participation; a gender-neutral toy nurse uniform for primary school children; a cadet programme where potential male students would be introduced to nursing; a conference on diversity in speech and language therapy which also included a workshop on male participation; the Men in Nursing Together group and social media; and a university initiative to increase male participation in nursing as part of their Athena SWAN work. However, these different efforts appeared dispersed which highlighted the need for more visible forums to communicate best practice, source ideas and learn from others' experiences. Policy support for such activities may benefit from considering providing forums for sharing best practice, for example, an online resource bank for news in this area, conferences or publications.

It may also be beneficial to consider what further support could be provided to universities, colleges and other relevant organisations specifically aimed at increasing male participation in nursing and allied health. Such support could take the form of disseminating recommendations for strategies to attract more male students, funding for such initiatives, and strategic co-ordination and oversight. Another example may be specific projects aiming to build the capacity of: school career advisors and teachers; university marketing and outreach staff; and healthcare professionals involved in outreach in order to implement some of the principles this research suggested were important for attracting more male students.

→ **Implications for university and college interventions: The following actions are recommended based on the findings above.**

Action by: Universities and colleges

Recommendation 3: Set targets and develop initiatives to increase male participation in nursing and allied health subjects:

- Explore whether strategic targets and initiatives could be developed as part of university widening participation plans or Athena SWAN gender equality commitments;
- Explore correlation between objectives relating to mature and male student participation, including better marketing of postgraduate nursing and allied health courses to men.

Recommendation 4: Use or develop mentoring programmes to provide male role models and support to potential and current male students in nursing and allied health subjects:

- Ensure male mentors are available to male students wherever possible but particularly at transition points, e.g. starting higher education or starting placements.

Recommendation 5: Structure open days, taster sessions and foundation/access courses in ways that maximise opportunities to raise male students' awareness of varied nursing and allied health subjects:

- Open days organised as fairs rather than limited to a single subject are more likely to raise awareness of nursing and allied health courses;
- Similarly, foundation courses that are organised flexibly to allow students to consider different university courses and make a more informed choice during their studies provide more opportunities for promoting nursing and allied health to male students;
- Consider organising joint open days or festivals for science, medicine, nursing and allied health subjects to broaden reach of nursing and allied health marketing to male students;
- Promote nursing and allied health courses on a regional basis in collaboration with other universities and colleges and health employers.

Recommendation 6: Review the university recruitment process to ensure it is gender-sensitive:

- Ensure interview panels are balanced in terms of gender wherever possible;
- Schedule interviews to ensure male candidates are invited together with some other male candidates so they are in a more gender-balanced environment on the interview day, where possible.

Action by: the Office for Students

Recommendation 17: Consider how regulation of access and participation can encourage and recognise targeted activity to address gender imbalance in courses leading to careers in nursing and allied health.

Recommendation 18: Encourage gender-neutral promotion of nursing and allied health through those National Collaboration Outreach Programmes (NCOP) partnerships engaging with these disciplines:

- Share with NCOPs findings and recommendations from this study;
- Promote evaluation and dissemination of effective engagement with male students in traditionally female disciplines funded through NCOP.

Recommendation 19: Consider other approaches to stimulating and influencing HE provider behaviour to increase male participation in nursing and allied health:

- Identify effective practice across the UK and internationally which may include convening stakeholders to learn from one another;
- Promote what works and co-create practical tools that providers can use to increase male participation;
- Incentivise the sector to test and evaluate new approaches to increase male participation;
- Enable and encourage collaborations between stakeholders to achieve greater impact nationally.

Note: Other recommendations relevant to the findings covered in section 4.3.2.2 about university and college interventions include: 2 and 12 (see Section 6 for all recommendations).

4.3.2.3. Healthcare employers and bodies

Outreach and awareness raising

As mentioned before, parents, teachers and career advisors in this sample felt local healthcare employers were less proactive than other organisations in liaising with schools to promote nursing and allied health careers. To remedy this, teachers and career advisors in were keen on closer partnerships with both local universities and healthcare employers to help promote healthcare careers. They wanted to see their greater presence at career fairs – also school visits and workshops run by health professionals.

Additionally, students, parents and schools were all very keen on having greater opportunities for work experience, including in the healthcare sector. Work placements were important for students because direct experience was seen as the best way to find out what they might enjoy or not enjoy doing. In addition, students were keen to add any work

experience to their CV to be more competitive. Interviews with current students suggested work experience placements were often seen as important for reinforcing and cementing their interest in a particular health career. For these reasons, both schools and many potential and current students thought it was very important for healthcare employers to increase opportunities for work experience. At the same time, some were also conscious health employers faced barriers in enabling this, such as bureaucracy, safeguarding and staff workload issues.

I think it will help to introduce students to the job because they would learn the basics and what they would have to do in the job. [Male, GCSE, ABC1, Manchester]

I think doing work experience definitely helps show them what a job really is because during school the idea of a career is nothing realistic. They only really know what jobs entail through what they hear rather than actually doing it. [Mum, son doing GCSEs, C2DE, Midlands]

There was some debate, however, over who should be targeted with work experience offers by healthcare employers. Firstly, there was an issue of age as some students questioned whether younger students may be upset if they witnessed a difficult situation in a hospital. Secondly, there was an issue of previous interest in healthcare, i.e. whether only those interested should be targeted or the offer should be wider. Given the scarcity of work experience opportunities in healthcare, some respondents felt this should be restricted to those who were interested in the sector. However, a smaller number felt it should be offered more widely as a way of raising awareness and potentially attracting new students who hadn't considered it before. Another way to provide some exposure in situ was mentioned by some healthcare support workers who suggested the NHS should have more open days for schools, which could help increase consideration and awareness of nursing and allied health careers. Ensuring all these opportunities were offered to both male and female candidates would be another way to promote these careers to men.

Example of good practice: A stakeholder highlighted a recently opened children's educational centre at the Chorley and South Ribble Hospital as a good example of innovation in enabling children and young people to learn about healthcare careers through experiential and interactive methods. The new Learning Inspiration Future Employment (LIFE) centre is set up as a mock hospital that allows children to learn about human anatomy, treatments and day-to-day life in a hospital.

Supporting interest from mature men

Interviews with current foundation and university students, as well as healthcare support workers, highlighted the potential to increase male participation through enabling male support staff in the health and care sector to progress towards nursing and allied health roles. Indeed, many of the current mature students in this sample first worked in the care sector and only realised through that work that they would enjoy working as a nurse or an

allied health professional. Current healthcare support workers who were interviewed often also aspired to progress to the next level, e.g. to become a registered nurse through an apprenticeship-based degree.

The research highlighted some critical factors in enabling male support workers within the health and care sector to embark on further studies and enter nursing and allied health careers: support and encouragement from their employers, managers or other health professionals to take steps to progress to these roles; financial support or arrangements where they could work and study; and pathways to overcome academic barriers through access and foundation courses.

College didn't really work for me as I didn't feel like I was mature enough at the time so I decided to approach it from a different angle. I went and worked in a care home and did my NVQ there and ended up staying there for 10 years until I decided to come into the NHS. [Male healthcare assistant on a nursing apprenticeship]

Financial support for further study was perceived as critical by all male mature students in this sample, both those who switched from other careers and those who previously worked within healthcare. Healthcare support workers who aspired to progress within healthcare also stressed the only way they could do this was if their income wouldn't decrease as a result of studying. Current mature students interviewed for this research either began their studies when they could still secure bursaries or they enrolled for apprenticeship-based degrees as healthcare support workers that allowed them to work and study. These examples gave some early indication that partnerships between local healthcare employers and universities in enabling apprenticeship degrees may provide one way to overcome financial barriers for healthcare support workers progressing towards nursing and allied health careers. The research also highlights the need for better information on different routes into nursing and financial support for mature students as some healthcare support workers aspiring to become registered nurses were unsure whether and how they could secure enough income to allow them to study.³⁷

If the Government wants more nurses, they should give student nurses the bursary. [Mature male student, Mental health nursing]

Higher education isn't necessarily financially feasible for everybody, especially parents [like me] that are split up, as I would get no financial help. So this [nursing apprenticeship degree course] was just an amazing opportunity and I thought I had to go for it. From when I started in the care home at 18 years old, it's what I always wanted to do. [Male, Health support worker enrolled on a nursing apprenticeship degree course]

Mature students' and healthcare support workers' pathways to nursing and allied health careers also highlighted the critical importance of access and foundation studies. These courses helped overcome academic barriers for those respondents who came from other careers, as well as those working in healthcare whose grades and academic performance at

³⁷ This is in line with the previous research on mature students of nursing and allied health subjects, which recommended that much clearer information should be provided "for prospective NMAH mature students about the student loan system and the additional financial support available through the Learning Support Fund." (Marketwise Strategies Limited report for the Office for Students, 2019, p. 14)

school were lower. Ultimately, what gave the latter group the confidence was the support of their managers and also a sense that they already knew so much about the job through their work experience. An admissions tutor also commented on lower academic performance at school as an experience many foundation students shared, as well as an aspiration to overcome this and make up for what they missed in the past.

For most of our students, there are some common themes. For some reason they didn't do very well at school. Some had children very early in their lives or it was to do with academic achievement and they have decided to leave school or college. They usually worked in retail or carer and support roles and at some stage something has triggered wanting to study and go into healthcare careers. They either reached a plateau in their profession or some students who have children wanted to be an example for their children so they can do well. [Admissions tutor for foundation students]

Interviews with foundation and current students also highlighted another pool of potential male mature students who may be interested in switching to nursing and allied health – those from the armed forces, emergency services and similar professions where career switching was common. Male respondents who moved to nursing or allied health studies and careers having served in the army or fire brigade felt they shared a similar ethos of helping others with the healthcare sector. Ex-army respondents also often had personal experiences of injuries and being treated, or mental health problems they experienced personally or witnessed. These personal experiences of ill health, treatment and care often prompted them to feel they would like to continue their work in healthcare after their previous careers ended. Some stakeholders also stressed the importance of partnerships between nursing and allied health professional bodies and male-dominated professions and employers where career switching was common as a potential route to increasing male participation.

Male students themselves who came from these backgrounds wished they had been given more career advice support that would have made it easier to make the switch. Some, additionally, wanted to know if there was any financial support or arrangements specifically aimed at ex-service students moving into healthcare. There may be an opportunity for nursing and allied health professional bodies to establish partnerships with these sectors to introduce mature men considering career switching to nursing and allied health.

After the army I didn't know what I wanted to do and then I joined a hospital as a porter. And then I wanted to do more than push people about in the trolley and the next step was to become a healthcare assistant. Then I wanted to better myself and went down the steps of wanting to become a nurse. I came here and then I found out about different roles and diagnostic imaging. [Male foundation student planning to start a diagnostic imaging course]

Finally, the research highlighted a potential role of healthcare environments and staff within marketing nursing and allied health subjects and careers. A proportion of current students of nursing and allied health subjects, as well as some potential students interested in healthcare, cited personal or family experiences of illness, treatment and care as factors that led them to want to work in these careers. When this trend was discussed with some stakeholders, they suggested nursing and allied health should be promoted more at

hospitals, through gender-neutral posters and collateral material and outreach events. Others, however, stressed the sensitive nature of targeting patients and their families with marketing at difficult times in their life. Current and potential students, as well as parents, agreed GP surgeries and hospitals could be effective places to promote these subjects and careers.

I spent a lot of time in hospital when I was younger, my grandad died when I was really young. Having spent time around many healthcare professionals... when I got older, the idea just stuck. I was about 4 or 5 when my grandad died, but that's one of my earliest memories about visiting him in hospital and being surrounded by nurses. So, the idea of helping people has always stuck with me. [Female, A level, ABC1, Leeds]

I'm an ex-armed forces. I came out with issues, my friends had issues, and I noticed that there wasn't much support out there. So, I decided to completely retrain. I retook my GCSEs and took a university access course. I came here to become a mental health nurse and that goal appears to be happening. I'm looking forward to working in acute services. [Male mature student, mental health nursing]

A further proportion of current students and potential students interested in healthcare cited role models within family or friends as reasons for considering nursing or allied health careers. Others also found out about these careers from friends, even if they did not necessarily refer to them as role models. Some of those who first worked in the care sector had a similar route to this work through someone they knew who suggested it to them. These experiences highlight the potential role of current nurses and allied health professionals in attracting more recruits – and more male students – to these subjects and careers. It may be worth exploring further whether there have been any more organised initiatives to motivate nursing and allied health staff to act as ambassadors of their professions in this way.

What these experiences also show is once again the importance of role models for considering nursing and allied health careers. As discussed with regards to schools, colleges and universities, existing mentoring structures within healthcare employers could be used to provide such role models, reassurance and support with any gender-specific questions for male students on placements, as well as recent graduates. Such support could be an important factor helping retention of male students and graduates.

→ Implications for interventions relevant to healthcare employers and bodies: Following from the findings above, the recommendations for healthcare employers are provided below. In addition, based on the discussion of mature students' experiences, needs and views, a related recommendation is included for professional and health sector bodies.

Action by: Healthcare employers

Recommendation 13: Increase opportunities for work experience and shadowing at the NHS and other healthcare employers for male and female secondary school students, as well as mature students interested in healthcare:

- Review existing barriers to increasing work experience opportunities, e.g. bureaucracy, safeguarding, staff workload, and how these could be overcome;
- Aim to introduce open days at local healthcare employers for schools and interested potential mature students and parents.

Recommendation 14: Use hospital lobbies and GP surgeries to promote the diversity of allied health and nursing careers, in gender sensitive ways.

Recommendation 15: Increase opportunities for career progression into nursing and allied health careers, e.g. through apprenticeships:

- Support health support workers to take up further study to progress to graduate nursing and allied health roles;
- Explore also opportunities for career support and progression for other, non-medical staff working in healthcare if interested in healthcare roles.

Recommendation 16: Ensure male mentors are available in the workplace to support men who are starting their careers in nursing and allied health careers:

- Male mentors can help identify any gender-specific support needs male staff may have in a female-dominated environment and impact positively on male staff wellbeing and retention;
- Link male mentoring as a support strategy to existing mental wellbeing and retention strategies and initiatives, for example, the NHS Staff and Learners' Mental Wellbeing Report recommendations and the Re-pair programme for reducing pre-registration student attrition and retention of the newly qualified staff.

Action by: Professional and health sector bodies

Recommendation 9: Ensure that outreach activities target potential mature students too, as mature men are more likely to consider nursing and allied health subjects and careers:

- For example, develop partnerships with male-dominated sectors and professions where career switching is common, such as the army, the RAF, the fire brigade, certain sports etc., to promote routes into nursing and allied health;
- Promote opportunities to upskill to current health support workers and equivalent roles, explaining different routes and associated funding.

Note: Other recommendations relevant to the findings covered in section 4.3.2.3 about areas for healthcare employer interventions include: 1, 2, 7, 12, 18, 20 and 21 (see Section 6 for all recommendations).

4.3.2.4. Health workforce and education policy

Respondents rarely discussed policy issues explicitly, with the exception of questions related to financial barriers, support and incentives for students of nursing and allied health. However, some of the research findings discussed in the previous sections did have policy implications related to health workforce and education. These are briefly highlighted below to frame the policy recommendations. However, they avoid repeating the findings already covered elsewhere.

As discussed, some of the factors deterring potential male students from considering nursing and allied health were financial: perceptions, particularly among secondary school male students, of low pay and high workload; and a need to retain income while studying for mature male students switching from healthcare or other professional roles. To some extent, solutions to these barriers may be marketing-related rather than policy-related, for example, raising awareness among potential students of the pay rise that follows career progression. Some policy solutions are already being developed and can be extended more systematically and to a greater number of nursing and allied health professions. For example, apprenticeship-based degrees suitable especially for those working in support healthcare roles are likely to be important for male participation given the higher proportion of mature male students.

These approaches may help reduce and offset some of the negative impact of real and perceived financial barriers to male participation in the wake of funding reforms and NHS workforce challenges. However, further policy analysis would be beneficial to assess whether other financial incentives related to pay and workload in these professions and financial support for mature students may be needed to attract more students of both genders and alleviate nursing and allied health staff shortages. Better information on the financial support available to mature students will also be critical for overcoming financial barriers to study.

There is a stigma for male nurses and with the dropping of the bursaries, why would you put yourself into so much debt and go into a vocation where you will never be able to pay that back? [Female, son doing A levels and CTEC, C2DE, London]

The NHS People Plan (NHS England and NHS Improvement, 2019), which is being developed as a long-term workforce strategy for the NHS, presents opportunities to address some of the concerns above around pay and workload as part of its commitment to make the NHS the best place to work. The People Plan's commitments to ensure a diverse workforce that reflects the patients it serves are directly relevant to the question of male under-representation in nursing and allied health professions. It is therefore imperative to use the NHS People Plan to drive action to increase diversity in these careers in terms of gender too.

The research also reinforced understanding of the pervasive and entrenched nature of gendered perceptions of particular careers, skills and interests. While gender-sensitive marketing and outreach is critical for attracting male students, there is also a need for wider action to tackle gendered perceptions of skills, activities and careers as root causes of male under-representation in nursing and in some allied health professions. This issue should also be seen in the wider context of gender inequality, as linked to perceptions of caring work as

female and other instances of gender segregation in the workforce. Given the scale of the challenge, these issues can only be addressed through wider and long-term government-led action to promote equal opportunities for both genders in terms of the skills they are encouraged to develop, activities, interests and careers.

→ **Implications for government recommendations: Based on the findings above but also elsewhere in section 4.3, the following government actions are recommended to help support male participation in nursing and allied health and reduce the gender gap in these careers.**

Action by: Government

Recommendation 20: Take action to stimulate mature student entry into these professions:

- Recognise the importance of mature students for increasing male student participation in nursing and allied health;
- Review financial support and student finance information for this group to help overcome financial barriers to study.

Recommendation 21: Use the NHS People Plan to drive action to attract both genders to nursing and allied health professions and increase male participation:

- Improve the workplace offer to nursing and allied health staff in terms of pay and workload and address barriers to recruitment of students and staff some of whom are deterred by high workload and perceptions of low pay.

Recommendation 22: Review school curriculum:

- To raise awareness of allied health and nursing through the science curriculum;
- To include gender-sensitive educational content about how different subjects relate to relevant careers.

Note: Other recommendations relevant to the findings covered in section 4.3.2.4 about areas for potential government policy interventions include: 1 and 11 (see Section 6 for all recommendations).

4.3.2.5. Media

Broader media representations of nursing and allied health professions were perceived as an important element of any strategy to increase male participation in nursing and allied health. The extent and the ways in which these professions were portrayed in the media were seen to impact both on awareness of allied health and stereotypes about nursing. For

this reason, potential and current students and parents often suggested using television programmes and online media to raise awareness of these professions and change stereotypical perceptions.

As discussed in section 4.3.1.6., such suggestions often involved ideas for introducing nursing and allied health careers as part of existing or new medical TV dramas, reality TV programmes about healthcare or children's programmes about doctors. News stories that showed positive aspects of working in nursing and allied health may be important to counter the negative perceptions of high workload created by the broader news about the challenges in the NHS. Increased visibility of male professionals working in these careers across these different media formats was further seen as critical in signalling to potential male students that these careers were for them too.

There were guys in the video [we saw], which shows it's not just girls that can do it. Men can do it as well. [Male, GCSE, ABC1, Manchester]

A two-step online approach was suggested for online media. Male students recognised the difficulty in prompting and motivating them to view online content about nursing and allied health given their common lack of interest. They stressed the importance of reaching them on online platforms where they spent a considerable amount of time or looked for information to help them make study and career decisions. News feeds on social media and university-related websites were often perceived as the best online touch-points. Respondents believed these could be used to reach male students and potentially lead them to other, more in-depth content on dedicated websites and YouTube, since students perceived videos as the most engaging way to find out about these careers.

→Implications for media interventions: The discussion above and section 4.3 about marketing requirements suggests the following actions may be needed to make media representations of nursing more gender-sensitive, raise awareness of opportunities in nursing and allied health and appeal to more potential male students.

Action by: All those involved in providing information, career advice and marketing of nursing and allied health subjects and careers, including university and colleges, professional and health sector bodies, healthcare employers and career advice providers

Recommendation 2: Develop a coordinated media strategy to increase male student participation in nursing and allied health careers to:

- Increase the visibility of male nurses and allied health professionals in the wider public domain, e.g. TV drama, documentaries, news, online videos;
- Promote positive stories about these careers in the news and other media, showcasing male and female professionals;
- Promote gender-neutral content about nursing and allied health on websites used by potential students to research study and apprenticeship opportunities, as well as on social media platforms and YouTube.

Note: Other recommendations relevant to the findings covered in section 4.3.2.5 about the wider media strategy include: 1 and 7 (see Section 6 for all recommendations).

5. Conclusions

The section below brings together the key findings from across different phases of this research and frames recommendations in this context. It outlines the gender-specific measures aiming to increase male participation in nursing and allied health. It then details the more general requirements needed to attract both genders and any specific impact these may have on male participation. The section concludes with a discussion of some key tensions between different strategies to increase male participation. Specifically, it discusses the questions of: male-specific initiatives versus broader strategies that appeal to both genders; short-term versus long-term strategies; and the value of promoting nursing and allied health together or separately.

The literature review and the qualitative research both underlined the prevalence of some key barriers to male students' consideration of nursing and allied health. Most notably, both research phases highlighted cultural perceptions of caring work as feminine and the experience of a female-dominated workforce as significant barriers to considering nursing. However, the qualitative findings of this study suggested that male students generally did not have similar preconceptions around allied health professions. Instead, the biggest barrier to considering allied health was low awareness of these careers. Other barriers related to perceptions of low pay and status, as well as concerns over high workload within the NHS, further deterred many male students from considering nursing and allied health professions.³⁸

³⁸ For a detailed discussion of barriers to male students considering nursing and allied health professions see section 3.1 of the literature review and section 4.2 of the qualitative research report.

5.1. Gender-specific measures

Review marketing materials

To address the barriers above, gender-sensitive marketing of nursing and allied health is of critical importance, among other related measures. As a first step in this direction, there is a need to review existing marketing materials for any gender bias towards female potential students.³⁹ Examples of such bias may include lack or scarcity of images of male students and professionals in these fields or language that suggests communications are directed at women. To remove any gender bias, the imagery and language would need to reflect both genders, for example, showing both genders visually.

However, the gender bias in marketing can extend to other elements of communications too, such as messaging, tone and style. This research highlighted the importance of promoting nursing and allied health in ways that relate to male students' interests, aspirations and perceived qualities and skills. For example, potential male students found certain nursing and allied health careers more appealing where these were linked to their interests in sciences, technology or sport. Most also wanted to be reassured that these careers would meet their broader aspirations, particularly around status, career progression and pay. For this reason, highlighting the specialist and skilled nature of nursing and allied health made these careers more appealing to male students. Emphasising clinical competencies alongside the caring nature of these professions may help make them more appealing to both genders.⁴⁰

Provide male role models

Another key gender-specific measure identified in the literature review and the qualitative research concerned the use of male role models studying and working in these careers. The qualitative research found that male role models were perceived as important by potential male students for a number of reasons. Firstly, these were seen to undermine cultural preconceptions deterring men from considering certain careers, particularly nursing. Seeing other men in these fields communicated to potential male students that these careers were for men too. Secondly, students sometimes felt they were more likely to relate to those promoting particular careers if they were similar to them in terms of age and gender. Thirdly, where male students were aware that certain careers were female-dominated, they welcomed being able to ask questions and seek reassurance from other men working in those careers.

The issue of male role models, therefore, cuts across a range of strategies important for increasing male participation. Male visibility is critical for gender-sensitive marketing and

³⁹ Similar considerations apply to course content and materials, as well as treatment of male students in female-dominated subjects. These may also need to be reviewed to remove any bias towards female students and avoid reinforcing the notion that men were out of place in that field. As this issue is critical for retention of male students rather than recruitment, it is noted here but a more detailed exploration was outside the scope of this study.

⁴⁰ For a discussion of marketing strategies to appeal to potential male students see section 3.2 of the literature review and 4.3.1 of the qualitative research report.

outreach. However, role models can also be provided through mentoring initiatives and the wider visibility of male students and professionals in university and professional structures, and the media.

Support male students as a minority gender

Male students in female-dominated subjects, such as nursing and some allied health subjects, may also need additional support as a minority gender. As the literature review and qualitative research found, some men can feel conspicuous, out of place or lacking in social interaction with other men in female-dominated environments. While there may be limited action universities and colleges can take to ensure more gender-balanced environments in the short term, this research highlighted some important considerations in this respect:

- Ensuring interview panels were balanced in terms of gender would make for a more gender-sensitive recruitment process;
- Universities may be able to schedule interviews so that male candidates are invited as part of more gender-balanced groups of students;
- Open days and taster sessions could be planned in ways that would also attract both genders, for example, holding joint open days for medicine or sciences and nursing and allied health subjects;
- Existing mentoring schemes at schools, universities, colleges and health employers could be used to pair up potential or current male students and recent graduates with male mentors who could provide reassurance and support around any issues arising from being a minority gender.

However, providing additional support discussed above may need to be discrete and not explicit, as otherwise there is a risk of reinforcing any concerns over being a minority gender.

Review the wider policy framework to address the gender gap

In addition, there may be a need to review the wider policy frameworks for re-dressing the gender imbalance in nursing and many allied health professions. The literature review noted some examples of such policy initiatives, including the Scottish Gender Action Plan, setting targets for increasing participation of students from an under-represented gender, and some early attempts to use the Athena SWAN Charter to drive action to increase male participation in nursing.

Qualitative research further suggested that having a broader policy framework for redressing gender imbalance in university subjects may help drive action in this area. University and college admissions and college staff interviewed for this research recognised the importance of gender-sensitive marketing, but any initiatives in this respect were ad hoc rather than driven by specific objectives to increase male participation. Some stakeholders also stressed that the issue may be more successfully addressed if treated as part of university widening participation and gender equality efforts.

However, lower male participation in university subjects may not be straightforward to address within either of these policy frameworks at the current time. Athena SWAN Charter has only recently moved to position lower male participation as a gender equality issue, whereas widening participation initiatives have tackled lower participation of men from particular under-represented groups rather than lower male participation in certain subjects in general. This research therefore suggests that the existing policy frameworks for addressing lower student participation may need to be expanded so that they can address lower male participation in healthcare subjects too.

Address gender stereotypes in the wider culture

There is furthermore a need to address a wider issue of the underlying gender culture which is at the root of the perceptions of care as women's work. As the literature review and qualitative research noted, ideas about nurses as female and doctors as male are often formed at an early age in children through experience and popular culture. They are reinforced by the wider experience of care givers being female, in family and in early childcare and education.

The initiatives to tackle these wider issues are beyond the scope of this study. However, to address gender stereotypes of nursing, these need to be undermined from an early age. When introducing primary school children to health careers, it will be important to demonstrate that both boys and girls can do nursing. This activity can be further supported by wider efforts to promote gender equality and diversity across the board – in terms of activities, roles, skills and potential future careers. Schools, parents, children's media and the toy industry all have a role to play in promoting equal opportunities for boys and girls. The issue of lower male participation in care – from family and early education to health and care contexts – should also be treated as a gender equality issue by the government. Specifically with regards to healthcare, the government should work to identify policies and support initiatives to reduce the gender gap in student and workforce participation, for example through its Gender Equality Office.

5.2. General measures with relevance to male participation

In addition to the gender-specific measures referred to above, the research highlighted other actions needed to increase student participation in nursing and allied health in general. While these measures are relevant to both genders, some have certain gender-specific aspects or are likely to have particular impact on male participation. These general measures can broadly be split in terms of their focus as follows:

- raising awareness of allied health professions, but also different specialisms in nursing through a range of channels;
- supporting mature students to enter nursing and allied health careers, e.g. through strengthening work-based and apprenticeship routes and tackling barriers specific to mature student participation;
- improving the workplace offer for nurses and allied health professionals;

- establishing or strengthening partnerships to promote nursing and allied health subjects and careers.

Each of these general measures is discussed below with regards to male participation in nursing and allied health.

Raising awareness

As suggested, low awareness was a particularly significant barrier to considering allied health professions, although there was some variation between individual careers. Awareness was an issue for nursing too albeit in a different way, as students were often unaware of opportunities to specialise in different areas of nursing and clinical aspects of nursing work.

Students, parents, teachers and career advisors alike were often most struck by the diversity of careers within allied health and nursing and the sheer range of opportunities. Many stressed students needed to be informed about the variety of health careers early on in their education – specifically, that there was more to healthcare than nurses, doctors and surgeons. This core message about the variety of opportunities was found to be a powerful advertisement for allied health professions in particular, but also for nursing where different specialisms were explained. This message is critical to communicate through school outreach at various stages, but also through ‘touch-points’ with potential students and their influencers at universities, colleges, healthcare settings and the media.

Some key preferences and ideas for how nursing and allied health should be promoted through these different channels emerged from the qualitative research:⁴¹

- **School outreach.** The research highlighted the wider issues with the patchy provision of career advice in schools, as well as perceptions that healthcare careers were less promoted than some others. Students and parents alike made the case for more comprehensive career advice provided at schools, including providing information about varied healthcare careers. Career advisors also stressed that schools may need to improve their career advice provision since they now needed to demonstrate how they met Gatsby benchmarks for quality career advice.

Students expressed their preference for those outreach session formats that allowed them to learn through experience, for example: interactive sessions that involved tasks; health professionals’ stories about their routes into particular careers or how they helped patients; or question and answer sessions with students of particular subjects. Another key way to raise interest students suggested involved linking nursing and allied health careers to their subject interests, for example, explaining how science subjects linked to these careers.

⁴¹ Detailed findings with regards to male students’ and influencers’ preferences and ideas for how nursing and allied health subjects and careers should be promoted through these various channels are discussed in section 4.3.2.

- **Universities and colleges.** Many students were keen for university and college open days and taster sessions to be used to educate them about a variety of courses relevant to their interests and school subjects rather than be limited to a single subject as was often the case. For example, students suggested organising open days as fairs provided more opportunities to find out about varied relevant subjects.

Similar opportunities were highlighted with regards to foundation students enrolling on health and science access courses. Admissions tutors stressed the importance of raising foundation students' awareness of the healthcare courses they could take, as they often weren't aware of the full range of available options when making their initial subject choices. For this to be possible, however, foundation courses would also need to be organised in flexible ways that allowed students to progress to different higher education courses.

- **Healthcare settings.** The research highlighted the role healthcare settings could play in promoting nursing and allied health subjects and careers. Specifically, individuals' personal experience of illness and care they or their family member received was sometimes cited as the main reason for considering working in health careers. Healthcare settings, such as GP surgeries or hospitals, are therefore important channels for raising awareness of routes into nursing and allied health careers for those whose personal experience may lead them to want to work in healthcare.
- **Wider media and popular culture.** Qualitative findings indicate that wider media representations of nursing – and the lack of visibility of many allied health professions – influence perceptions of these careers. Where certain careers were featured on TV programmes, such as paramedics on *'24 hours in A&E'* – this was also felt to have had a positive impact on student recruitment. A broader media strategy raising the profile and awareness of these careers will therefore be important to support other student recruitment efforts. In addition to online content and campaigns promoting nursing and allied health, it would be beneficial to explore the opportunities to showcase these careers through the news, reality TV, documentaries, dramas and children's programmes.

While raising awareness through these different channels is important for recruiting both genders, it may be even more important for male student recruitment because men are generally less likely to be exposed to nursing and allied health careers through role models and the wider culture. For example, female students interviewed in this research sometimes mentioned the role models they had for considering these careers, including family, friends and popular culture. Current male students of nursing, conversely, sometimes commented how they lacked such role models in the wider culture. In some cases, potential male students may even be deterred from considering these careers by influencers such as parents or teachers. For these reasons, awareness raising interventions are likely to be even more critical for male student recruitment as they lack other triggers to consider these careers.

Supporting mature students

Supporting mature students' entry into nursing and allied health was a further general measure important for both genders, but with additional implications for male students as there was a higher percentage of men among mature students. Previous and this research point to some reasons for this. Male students of nursing commented how men sometimes took longer to consider nursing because of the barriers they needed to overcome. This research suggested nursing and allied health careers became more attractive to mature male students through particular work or life experiences. For example, some decided to switch from previous work to nursing or allied health attracted by greater financial stability and/or opportunity for worthwhile work. Others came to nursing and allied health through experiences of care work – either through personal experience of illness or working in health and care settings in support roles. Supporting mature potential and current students is therefore an important route for increasing male participation altogether.

Current or potential mature students also stressed they could not take up further study without the ability to retain the income they previously had through work. In the context of the funding reforms, work-based and apprenticeship routes were welcomed as arrangements where they could work and study. Partnerships between local healthcare employers and universities in enabling apprenticeship degrees may provide one way to overcome financial barriers for mature students progressing towards nursing and allied health careers, particularly for those already working in health support roles.

Mature students' and healthcare support workers' pathways to nursing and allied health careers highlighted the critical importance of access and foundation studies. These courses helped overcome academic barriers for those respondents who came from other careers, as well as those working in healthcare whose grades and academic performance at school were lower.

Improving the workplace offer

Improving the workplace offer for nurses and allied health professionals was another general measure important for both genders, but particularly relevant to some of the barriers to male participation. Issues around low pay and high workload in nursing and some allied health professions were raised in the qualitative research as important barriers for men considering these careers. While concerns over pay and workload were relevant to female students too, this research found that female students were more likely to be interested in healthcare – even though they were not recruited on that basis – and more likely to prioritise their altruistic motivations over pay and workload concerns. The NHS People Plan, which is currently being developed as a long-term workforce strategy, provides an opportunity to address the issues of high workload and perceived low pay as factors affecting student and staff recruitment particularly with regards to nursing, but also more generally relevant to NHS careers.

Partnerships to promote nursing and allied health

The last general measure highlighted by this research concerned the partnerships that were required to promote nursing and allied health subjects and careers effectively. The research showed that the current level of career advice at schools in general, and with regards to healthcare careers in particular, was often felt to be inadequate. Securing work experience in healthcare settings was further perceived as very difficult, an issue raised by current but also some potential students. Greater collaboration between schools, health employers and universities and colleges is needed to improve career advice and provision of work-shadowing opportunities. National Collaboration Outreach Partnerships (NCOPs) could potentially be better used to promote nursing and allied health careers in schools.

5.3. Tensions and risks to consider

Finally, the findings above point to some key tensions between different strategies for increasing male participation and the risks some of them carry. General strategies such as supporting mature students or improving the workplace offer will need to be carefully positioned in terms of their specific relevance for increasing male participation. Otherwise, there is a risk they may be perceived as implying that such measures were less important to implement for female students and professionals, when they would benefit and help attract both genders. These strategies will also need to be balanced against other gender equality initiatives aiming to reduce the gender pay gap in healthcare to address female professionals' concerns over the potential impact of increased male participation on their career opportunities.

In addition, integrating strategies were often preferred by male students – and sometimes female too – to those targeting men only, with the exception of role models and mentoring. Focusing explicitly on men in nursing and allied health was sometimes seen to run the risk of backfiring by reinforcing or suggesting the idea that there was a problem with men in those fields. A further risk is the danger of it being seen as reinforcing gender stereotypes rather than undermining them. Specifically, the language used to describe masculine interests, skills, qualities or aspirations that could be included in marketing can raise controversy if it is seen to generalise about men or women or exclude those who do not conform to stereotypical gender identities.

The strategies discussed in the report were sometimes also split in terms of short-term and long-term outcomes:

- **School leavers vs. mature students:** Some stakeholders felt that university and outreach programmes' focus on attracting school leavers may not address the recruitment challenges within nursing and allied health quickly enough. While recognising that school outreach was important for long-term recruitment, these respondents still felt that supporting mature students to access nursing and allied health courses and careers may be a quicker solution to the pressing recruitment challenges. In particular, enabling health support staff to progress towards graduate nursing and allied health was seen as critical.

- **Changing marketing materials vs. changing the broader gender culture:** Addressing gender stereotypes as barriers to considering nursing may also have short-term and long-term fixes. Making marketing materials more gender-sensitive by including men or emphasising links with technology when marketing therapeutic radiography would be short-term solutions and potentially ‘quick wins’. However, addressing the root causes of cultural perceptions of caring work as feminine would require long-term intervention and collaboration between the government, professional bodies, healthcare employers, higher education providers, media, schools and parents.

This research also raised the question of the value of promoting nursing and allied health subjects and careers together or separately. The qualitative research with students and influencers suggests marketing these subjects together may not always be helpful for promoting allied health careers. Firstly, because nursing is more well-known than allied health, it can dominate discussions where these careers are introduced together. Secondly, as gender stereotypes for nursing are very strong, promoting nursing and allied health careers together runs the risk of linking allied health to those stereotypes where there were none beforehand. This is not to say that there are no situations where it would not be helpful to promote these careers together. For example, they can be promoted together within broader communications about the diversity of health careers or within joint university open days that aim to introduce students to a range of careers. However, if aiming to address low male participation, nursing and allied health careers may require separate strategies and promotion to tackle the different key barriers to these careers – gender stereotypes and low awareness respectively.

6. Recommendations

The key findings and strategies outlined in the previous section present the context and rationale for the recommendations that follow. The recommendations themselves are grouped in relation to institutions and organisations responsible for specific actions, rather than organised around key themes. The reason for this was to ensure the responsibility of different organisations was clearer for different aspects of the recommendations. The exception to this is the first recommendation around gender-sensitive marketing which cuts across a range of different organisations involved in marketing of nursing and allied health subjects and careers. Where other recommendations relate to more than one type of organisation there may also be some overlap, but attempts were made to minimise this. The recommendations also largely focus on male participation given the objectives of this study, even though some of the more general strategies to attract students are relevant to both genders as explained in the conclusions.

All those involved in marketing of nursing and allied health subjects and careers, including:

Universities and colleges, professional and health sector bodies, healthcare employers, career advice providers

- 1. Ensure career information, marketing and outreach content promotes nursing and allied health careers in ways that appeal to both genders:**
 - Remove any messages, language or imagery that may reinforce cultural stereotypes of nursing and caring professions as female careers;
 - Adapt content to emphasize clinical competencies and skills in these careers alongside caring aspects and highlight relevance to sciences, technology, problem-solving and 'hands-on' work to match potential male students' interests, perceived qualities, skills and career motivations;
 - Highlight career progression, specialisation and pay opportunities to overcome concerns over status and pay;
 - Ensure male students and professionals are as visible as females in marketing and outreach materials and events, wherever possible;
 - Disseminate these recommendations to all those marketing nursing and allied health, for example as a toolkit that could include guidance, checklists and examples of good practice.

- 2. Develop a coordinated media strategy to increase male student participation in nursing and allied health careers to:**
 - Increase the visibility of male nurses and allied health professionals in the wider public domain, e.g. TV drama, documentaries, news, online videos;
 - Promote positive stories about these careers in the news and other media, showcasing male and female professionals;
 - Promote gender-neutral content about nursing and allied health on websites used by potential students to research study and apprenticeship opportunities, as well as on social media platforms and YouTube.

Universities and colleges

- 3. Set targets and develop initiatives to increase male participation in nursing and allied health subjects:**
 - Explore whether strategic targets and initiatives could be developed as part of university widening participation plans or Athena SWAN gender equality commitments;
 - Explore correlation between objectives relating to mature and male student participation, including better marketing of postgraduate nursing and allied health courses to men.

- 4. Use or develop mentoring programmes to provide male role models and support to potential and current male students in nursing and allied health subjects:**
 - Ensure male mentors are available to male students wherever possible but particularly at transition points, e.g. starting higher education or starting placements.

5. Structure open days, taster sessions and foundation/access courses in ways that maximise opportunities to raise male students' awareness of varied nursing and allied health subjects:

- Open days organised as fairs rather than limited to a single subject are more likely to raise awareness of nursing and allied health courses;
- Similarly, foundation courses that are organised flexibly to allow students to consider different university courses and make a more informed choice during their studies provide more opportunities for promoting nursing and allied health to male students;
- Consider organising joint open days or festivals for science, medicine, nursing and allied health subjects to broaden reach of nursing and allied health marketing to male students;
- Promote nursing and allied health courses on a regional basis in collaboration with other universities and colleges and health employers.

6. Review the university recruitment process to ensure it is gender-sensitive

- Ensure interview panels are balanced in terms of gender wherever possible;
- Schedule interviews to ensure male candidates are invited together with some other male candidates so they are in a more gender-balanced environment on the interview day, where possible.

Professional and health sector bodies

7. Promote the core messages that 'healthcare careers are about skills, not gender' and that 'there is a huge range of careers in healthcare' to children and students throughout different stages of education, starting from primary school:

- Raising the profile of nursing and allied health careers by emphasizing the academic, skilled and specialist nature of these careers, as well as variety of opportunities will be attractive to male and female students and influencers.

8. Support schools to meet Gatsby benchmarks in providing career advice on nursing and allied health professions:

- Produce resources teachers and career advisors can use and adapt to different formats of career advice and events;
- Ensure nursing and allied health career information are built into teacher and career advisor training to build their capacity to promote these careers;
- Ensure outreach sessions meet students' preferences in terms of the formats e.g. use interactive workshops, story-telling, documentary style videos to engage potential students.

9. Ensure that outreach activities target potential mature students too, as mature men are more likely to consider nursing and allied health subjects and careers:

- For example, develop partnerships with male-dominated sectors and professions where career switching is common, such as the army, the RAF, the fire brigade, certain sports etc., to promote routes into nursing and allied health;
- Promote opportunities to upskill to current health support workers and equivalent roles, explaining different routes and associated funding.

10. Promote allied health careers together:

- Strengthen partnerships between different allied health professional bodies to highlight the diversity of opportunities, as well as maximise the reach of allied health marketing.

Schools and career advice providers

11. Ensure information about nursing and allied health careers is provided to all male and female students whose subjects, interests and perceived qualities are relevant to these careers:

- Provide students with information on how these careers relate to a wide range of subjects, including biology, physics, psychology, linguistics, PE etc. and signpost interested students to further resources on these careers;
- Ensure different routes to nursing and allied health careers are explained to students, including apprenticeship-based routes in line with the Baker clause.

12. Establish partnerships with local health employers, universities and colleges to provide career advice about nursing and allied health subjects, mentorship and work-shadowing opportunities:

- This aligns with recommendation 3 of the NHS Staff and Learners' Mental Wellbeing Report recommendations.

Healthcare employers

13. Increase opportunities for work experience and shadowing at the NHS and other healthcare employers for male and female secondary school students, as well as mature students interested in healthcare:

- Review existing barriers to increasing work experience opportunities, e.g. bureaucracy, safeguarding, staff workload, and how these could be overcome;
- Aim to introduce open days at local healthcare employers for schools and interested potential mature students and parents.

14. Use hospital lobbies and GP surgeries to promote the diversity of allied health and nursing careers, in gender sensitive ways.

15. Increase opportunities for career progression into nursing and allied health careers, e.g. through apprenticeships:

- Support health support workers to take up further study to progress to graduate nursing and allied health roles;
- Explore also opportunities for career support and progression for other, non-medical staff working in healthcare if interested in healthcare roles.

16. Ensure male mentors are available in the workplace to support men who are starting their careers in nursing and allied health careers:

- Male mentors can help identify any gender-specific support needs male staff may have in a female-dominated environment and impact positively on male staff wellbeing and retention;
- Link male mentoring as a support strategy to existing mental wellbeing and retention strategies and initiatives, for example, the NHS Staff and Learners' Mental Wellbeing Report recommendations and the Re-PAIR programme for reducing pre-registration student attrition and retention of the newly qualified staff.

The Office for Students

17. Consider how regulation of access and participation can encourage and recognise targeted activity to address gender imbalance in courses leading to careers in nursing and allied health.

18. Encourage gender neutral promotion of nursing and allied health through those National Collaboration Outreach Programmes (NCOP) partnerships engaging with these disciplines:

- Share with NCOPs findings and recommendations from this study;
- Promote evaluation and dissemination of effective engagement with male students in traditionally female disciplines funded through NCOP.

19. Consider other approaches to stimulating and influencing HE provider behaviour to increase male participation in nursing and allied health:

- Identify effective practice across the UK and internationally which may include convening stakeholders to learn from one another;
- Promote what works and co-create practical tools that providers can use to increase male participation;
- Incentivise the sector to test and evaluate new approaches to increase male participation;
- Enable and encourage collaborations between stakeholders to achieve greater impact nationally.

Government

20. Take action to stimulate mature student entry into these professions:

- Recognise the importance of mature students for increasing male student participation in nursing and allied health;

- Review financial support and student finance information for this group to help overcome financial barriers to study.

21. Use the NHS People Plan to drive action to attract both genders to nursing and allied health professions and increase male participation:

- Improve the workplace offer to nursing and allied health staff in terms of pay and workload and address barriers to recruitment of students and staff some of whom are deterred by high workload and perceptions of low pay.

22. Review school curriculum:

- To raise awareness of allied health and nursing through the science curriculum;
- To include gender-sensitive educational content about how different subjects relate to relevant careers.

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