Review of attitudes towards non-medical careers in the NHS

Implications for mental health careers

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Summary

Background

Around one in six adults report experiencing a common mental disorder and in the region of 1.5 million people are referred specifically to NHS mental health therapy services a year (NHS Digital, 2016; NHS England, 2019). Around 200,000 people are substantively employed by the NHS to care for people who need mental health services (Beech and others, 2019). Ensuring there are sufficient staff to meet demand is clearly important, yet even sustaining, let alone building this workforce is particularly challenging. The latest data suggest that there are over 20,000 vacancies across mental health trusts – a higher proportion than any other sector, while a new and more precise way to count the mental health workforce suggests that numbers have fallen by around 7% in nine years (NHS Digital, 2019; NHS Improvement, 2019).

Aim and methods

The underlying objective of this work was to better understand attitudes towards non-medical mental health professions in England. However, given a lack of published evidence on this group specifically, our approach was instead to learn lessons from existing research into people's attitudes and choices towards all non-medical clinical careers in England and similar health settings. Doctors were not included since medical careers have been the subject of extensive research and attitudes towards them are relatively distinct from other clinical roles.

Our approach was primarily to review existing national literature including policy documents, peer-reviewed papers, grey literature and key reports to explore the available evidence on people's attitudes, as well as determinants and choices, towards these clinical careers in the health services across the four UK nations and Ireland. Once findings on these careers were extracted and synthesised, we explored those which were directly and indirectly relevant

to mental health careers. We also noted where research was related to three challenged professions (mental health nursing, learning disability nursing and occupational therapy).

Overview of literature

Our initial search identified 1,262 articles. After excluding any which, for example, did not relate to England, the other UK nations or Ireland, or were published more than a decade ago, we were left with 20 relevant articles, including some identified through hand-searching, expert suggestions or reference lists. These included both quantitative studies – primarily cross-sectional surveys – and qualitative research, including focus groups and interviews. The subject populations for these studies varied, covering: school students; current clinicians and those in education or training; careers advisers; and combinations of these groups. While the majority of the literature focused on nursing in general, one related to mental health careers specifically.

Key findings

Broadly speaking, the literature tended to describe negative attitudes towards non-medical clinical careers. For instance, while many recognise the value in a caring profession and that nursing in particular can be rewarding, these motivating factors were often not enough to overcome the barriers that exist to entering the profession (The Open University, 2019). Our synthesis of the literature identified a range of themes around the attitudes and their determinants, covering the following areas (more detailed themes are also summarised in Figure 1 on page 8):

- a person's background (e.g. gender, skills)
- their psychological or personal influences (e.g. earlier experiences)
- cultural or environmental influences (e.g. the media).

Decisions are likely to be influenced by a complex mix of these determinants. However, the relative importance of these influences remains relatively untested and some factors have not been investigated at all. Most studies

looked at small number of determinants rather than across a range but some broader studies drew out the relative importance of the different influences. One recent survey of young people (18–24 years) who considered nursing suggested the cost of training was significant: 33% cited it as a reason for opting against a career in nursing. Many also highlighted the importance of working conditions (24% citing working hours and 24% perceived pressure) while few opted against it due to entry requirements (11%) or third party advice (6%) (The Open University, 2019). Although the influence of gender is covered in some detail, no articles substantively explored the relationship between some key demographic characteristics – such as age, ethnicity, personal circumstances (such as family care commitments) or socio-economic class – and attitudes and choices of careers.

Conclusions

The articles identified a number of relevant recommendations, including the suggestions to promote positive role models both nationally and locally and to create more opportunities for exposure to the roles. The recommendations are shown in Table 1.

Table 1: Key recommendations from the literature

Focus	Recommendation	Papers
Role models	• Promote positive role models through national and local media to show variety in career prospects and benefits to the general public	Morris (2010); Morris-Thompson and others (2011)
Accessible and accurate information	• Update NHS Careers information and make it user-friendly	Latham and others (2013)
Relatives, careers advisers and significant others	• Nurse educators to inform and expose parents, guardians, guidance teachers and career advisers to positive role models and updated information about benefits of nursing careers	Neilson and McNally (2013)
Public image	• Specifically, adopt a more assertive approach to presenting a public image of learning disability nursing	Genders and Brown (2014)
Exposure	• Create more opportunities for students to be immersed in mental health settings	Edward and others (2015)

Given that the vast majority of the literature was not specific to mental health careers, it is important to consider the extent to which the findings are generalisable to non-medical, clinical mental health careers. We have highlighted below some key factors that might affect mental health careers specifically (Table 2).

Not only is there a paucity of research on mental health careers; the majority of the literature we reviewed was limited to adult nursing or nursing in general. There were no identified articles on occupational therapy which met our inclusion criteria while there was only one specifically on mental health and one on learning disability nursing. However, the two papers on these strands of nursing did both note that exposure to the specific career in question can be a key determinant of career choice (Edward and others, 2015; Genders and Brown, 2014).

Table 2: Summary of key factors that might specifically influence decisions on mental health careers

Factor	Consideration regarding mental health careers
The perceived status	A failure to achieve 'parity of esteem' may transfer to the attitudes and choices of a mental health career as opposed to a physical health career
The role	The multitude of non-medical mental health professions might contribute to greater uncertainty – compared to other clinical careers – regarding the specific nature of the role Many of the roles also differ in terms of entry requirements, education, training and career progression compared to, in particular, adult nursing (or nursing in general) which was the focus of the majority of the literature in this review
Exposure	Early exposure to mental health services – and so mental health careers – may be less likely than other clinical careers
Gender	There are some suggestions that non-medical mental health careers, specifically mental health nursing, are more appealing to male students and that this stream of nursing (as with, for example, learning disability nursing) are considered more gender neutral than many other clinical roles.

We also identified a number of articles which discussed specific campaigns and initiatives designed to address recruitment issues. The determinants that affect people's career choice which we identified in the literature can also be seen in these campaigns. This includes the person's exposure or experience to a particular profession, as well as their own perceptions. Campaigns have tried to specifically address these through various initiatives, or projects that enable individuals to experience what the profession is like first hand, or that create a more positive and realistic image of what, for example, nursing is. Some initiatives have focused on distinct audiences including children and young people (e.g. Step into the NHS, Think Future) and mature students (Earn and Learn premiums). There are also examples of local recruitment programmes (e.g. CapitalNurse), as well as worldwide initiatives designed to improve the image of nursing (Nursing Now).

The findings from the literature also suggest some wider implications. For example, it appears that the responsibility for improving attitudes towards non-medical careers falls across a range of organisations and bodies. Furthermore, the findings on the role that gender plays in career choice and the importance of some aspects of this – including the level of pay – feed into the wider current discourse around pay equality.

Similarly, the importance of exposure to professions for making career decisions has wider implications – broader than just health care settings – for how work experience is managed in England. There is also evidence that the requirements and financial costs of study may be significant determinants, yet historically these have been poorly understood. Given the relatively recent changes to the funding situation (such as bursaries) for many opportunities to study and train to become a clinician, the risk of misconceptions is particularly high.

Finally, an implication on the importance of the media is that stakeholders need to be aware of the risk of unintended consequences of overly focusing on negative health care stories even where the aim is to improve the outcomes of the NHS. In general, however, given the scale of the workforce crisis, it is imperative that efforts are made to positively influence the various determinants of attitudes towards mental health careers – hopefully using the insights from this review – and that this is done as a matter of urgency.

Figure 1: Outline of key themes on attitudes towards non-medical careers

Person's background

- Personal motivations are numerous and complex
- A motivation to pursue an altruistic career appears a positive influence on attitudes to clinical careers
- Experience of the actual roles, for example through work experience, generally has a positive effect on attitudes towards that clinical career
- Gender is likely to have a material impact on attitudes towards certain careers
- Certain clinical careers are likely to be dismissed by people who are considered high-academically achieving

Psychological or personal influences

- Exposure to care appears to be a positive influence on likelihood to pursue a clinical career and, furthermore, affect which specialty
- Relatives can have a notable impact on attitudes towards clinical careers in a positive and negative way
- However, relatives may have limited understanding of clinical professionals other than medicine and, even where they are healthcare professional, their views can be negative
- Careers advisers can affect whether an individual pursues a clinical career and, within this, which profession
- However, some careers advisers have a lack of awareness of clinical roles and can have biased views on who would be suitable candidates

Cultural or environmental influences

- General public opinion is that key clinical professions are societally valuable but subjected to a poor image
- Attitudes towards careers appear to be affected by either a lack of awareness or stereotypes, which has been attributed, in part, to inaccurate or negative representations in the media
- The perceptions of clinical careers often bear little resemblance to the actual roles and there is also limited awareness of the differences between roles
- However, for some, there appears to be a hierarchy in status between clinical careers, with medicine considered more attractive
- Views around working conditions appear to have a negative effect on the attitudes towards careers although career flexibility, in particular, appears a positive draw
- Perceptions around the low pay of some non-medical professions is cited as a reason for people finding a potential clinical career as less attractive
- Many appear to be put off clinical careers due to the financial costs and requirements of training

1   Introduction

Background

Around one in six adults report experiencing a common mental disorder and in the region of 1.5 million people are referred specifically to NHS mental health therapy services a year (NHS Digital, 2016; NHS England, 2019). Around 200,000 people are substantively employed by the NHS to care for people who need mental health services (Beech and others, 2019). Ensuring there are sufficient staff to meet demand is clearly important, but even sustaining, let alone building this workforce is particularly challenging.

Part of the £1.8 billion investment detailed in the Mental Health Five Year Forward View (2016) was to recruit and retain a sufficient mental health workforce in order to support delivery of more accessible services. The subsequent mental health workforce strategy from Health Education England set ambitious targets, including employing 19,000 additional members of staff by 2020 (Health Education England, 2017).
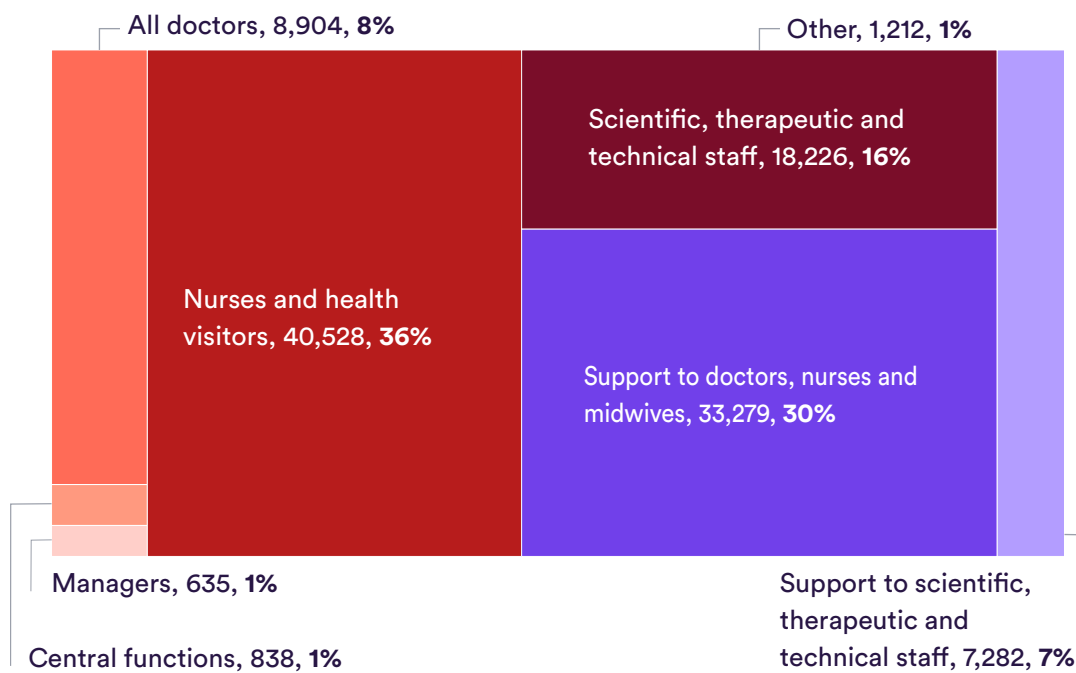
Mental health services have particular workforce issues. As at March 2019, one data source suggests there were over 20,000 vacancies in mental health trusts. This accounts for 10% of their workforce – higher than the reported level of acute (8%), community (8%), specialist (6%) and ambulance trusts (5%) (NHS Improvement, 2019). The largest single group of clinicians in mental health services are registered mental health nurses, but their numbers are in decline. There was an 11% drop in the number of nursing posts between November 2009 and 2018 (Beech and others, 2019). More generally, a new and more precise way to count the mental health workforce suggests that numbers have fallen by around 7% over this timescale (NHS Digital, 2019).

These pressures have prompted efforts to explore attitudes towards mental health careers and, specifically, NHS careers in mental health nursing, learning disability nursing and occupational therapy. This review looks at broader insights from existing research on careers in the NHS in order to define how best to address attitudes towards careers in these roles.

About mental health careers

The delivery of mental health services involves a range of different professions (see Figure 2). To develop an understanding of the different roles – and how literature on other professions might therefore be generalised (or not) to them – we mapped mental health professions in the NHS, as summarised in Table 3 on page 12. This exercise demonstrates that there are a large number of mental health professions, with varying qualification requirements, educational programmes and training courses and starting salaries. In particular, it is notable that a number of quite different educational course types of differing lengths can emerge with the same starting level and salary.

Figure 2: Staff groups within the mental health workforce (full-time equivalents as at September 2018)

All doctors, 8,904, **8%**

Other, 1,212, **1%**

Scientific, therapeutic and technical staff, 18,226, **16%**

Nurses and health visitors, 40,528, **36%**

Support to doctors, nurses and midwives, 33,279, **30%**

Managers, 635, **1%**

Support to scientific, therapeutic and technical staff, 7,282, **7%**

Central functions, 838, **1%**

Source: NHS Digital (2019). Due to data limitations, exact numbers need to be treated with caution.

Influences on occupational choice

While retention of existing staff and recruitment from abroad are important ways to maintain the workforce, another key factor is the supply of new staff. To seek to increase this pipeline of new staff into mental health services requires an understanding of the influences on people's career choices.

There is a wealth of general (i.e. non-healthcare-specific) literature on the factors affecting occupational choice. One well-established lens to view the influences suggests three determinants: a person's background (e.g. gender, skills); their psychological or personal influences (e.g. earlier experiences); and cultural or environmental influences (e.g. the media) (Farmer, 1985; Litosseliti and Leadbeater, 2013). A further model (Wu and others, 2015) – raised in the context of health care careers – categorises the influences as:

- intrinsic factors, e.g. altruistic desire or personal interest in health care
- extrinsic factors, e.g. pay, professional prestige or job autonomy
- socio-demographic factors, e.g. gender and socio-economic status
- interpersonal factors, e.g. the influence of family.

Table 3: Summary of mental health professions

	Qualification	Length of education	Starting salary/ band
Mental health nurse	Degree	Typically 3 years for undergraduate, 4 years for apprenticeship, or 18 months for specialist course	Band 5
Mental health social worker	Post-graduate qualification (master degree)	2 years (+ previous required training)	Equivalent to band 4/5, dependent on role.
Children's wellbeing practitioner	Post-graduate qualification	Typically 1 year part-time (+ previous required training)	Band 5 (in training, band 4)
Education mental health practitioner	Post-graduate qualification	1 year (+ previous required training)	Band 5 (in training, band 4)
Psychological wellbeing practitioner	Postgraduate certificate (if applicant already has a degree) or graduate-level qualification. Apprenticeship also available.	Typically 1 year (+ previous required training)	Band 5 (in training, band 4)
Counsellor	Diploma or degree level qualification	Typically 3 to 4 years (+ previous required training)	Dependent on role
Cognitive behavioural therapist	Post-graduate qualification	Typically 1 year (+ previous required training)	Band 6 or 7, depending on current psychological therapy expertise
Clinical psychologist	Post-graduate qualification	Typically 3 years (+ previous required training)	Band 7 (in training, band 6)

	Qualification	Length of education	Starting salary/ band
Counselling psychologist	Post-graduate qualification	Typically 3 years (+ previous required training)	Band 7 (in training, band 6)
Forensic psychologist	Post-graduate qualification	Typically 3 years (+ previous required training)	Band 7 (in training, band 6)
Health psychologist	Post-graduate qualification	Typically 3 years (+ previous required training)	Band 7 (in training, band 6)
Adult psychotherapist	Post-graduate qualification	Typically 4 years part-time (+ previous required training)	Band 7 (in training, band 6)
Systemic family therapist	Post-graduate qualification	4 years part-time (+ previous required training)	Band 7 (in training, band 6)
Child and adolescent psychotherapist	Post-graduate qualification	Typically from 5 to 7 years (+ previous required training)	Band 7, 8 (in training, band 6)

Sources: National Careers Service; Health Careers; Prospects; Association for Family Therapy & Systemic Practice.

Notes:
1. For presentation purposes, we have simplified some of the details. It is also not an exhaustive list – for example, it does not include mental health roles for occupational therapists.
2. 'Band' refers to NHS Terms and Conditions of Service (Agenda for Change) pay system for staff in the NHS, except doctors, dentists and senior managers. A higher band number denotes a higher pay range. The band/salary relates to the grade/remuneration once qualified.

Aims and objectives

The immediate objectives for this piece of work were to:

- gain a better understanding of people's attitudes towards mental health careers, the main determinants and how these affect the likelihood that people will apply for these roles

- identify suggestions and recommendations on how best to inform future promotional campaigns and positively influence the demand for non-medical mental health roles, particularly those identified as 'shortage areas' (mental health nursing, learning disability nursing and occupational therapy).

The intention is that this research will be used to shape further research into people's attitudes towards choosing NHS careers in mental health and the shortage areas. Moreover, this work has sought to act as a stocktake on existing knowledge to help inform future research and avoid any duplication of effort.

Our approach and scope

The primary focus of this research is on non-medical clinical mental health careers. However, there appeared to be limited research in this area. For instance, a previous systematic review on factors influencing career choice among health care students identified only two UK studies on professions other than medicine or dentistry (Wu and others, 2015). With this in mind, our approach was to look at all non-medical clinical careers and then draw out (either directly or indirectly) the lessons for attitudes towards mental health careers and, if possible, the three occupations of particular interest (mental health nursing, learning disability nursing and occupational therapy). The focus on and use of the term 'non-medical' in this review is to differentiate between doctors and other clinical careers, as we have excluded doctors from this analysis. Medical careers have been the subject of extensive research and attitudes towards them are relatively distinct from other clinical roles. We adopted a multi-method approach, which includes four main components of which the largest was the literature review (Figure 3). More detail on our methodology is provided in Appendix A.

Figure 3: Overview of methodology
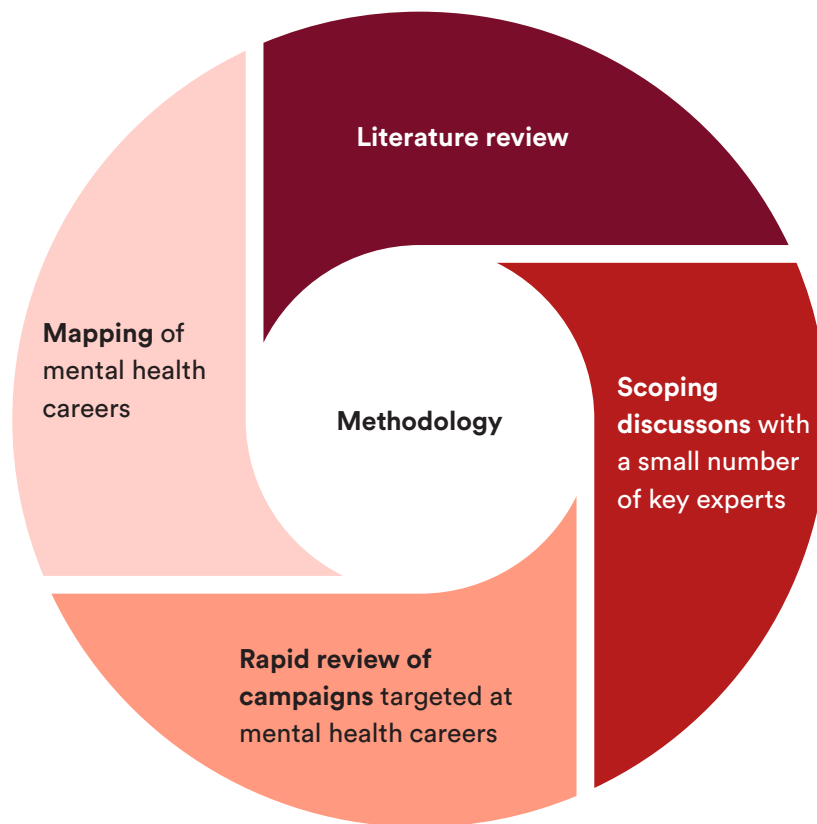
We limited our review to research based on the UK and Ireland. This is because the perceptions and nature of health care careers, training and education arrangements; terms of employment; and the health system in general can vary considerably from country to country, so wider international literature might not be appropriate for generalising to England. Also, to reflect the fast-changing career aspirations and perceptions we limited our search to the last decade, excluding papers published before 2009. In terms of whose attitudes were of interest, we focused on people who may potentially join the workforce rather than, for instance, the attitudes of patients.

For the academic literature review, six databases were searched: HMIC, PsycINFO, Medline, ABI, CINAHL and Web of Science. All titles and abstracts identified were screened on the basis of our inclusion and exclusion criteria (given in Table 4), to identify studies with the greatest relevance to attitudes towards non-medical clinical careers in the NHS.

Table 4: Inclusion and exclusion criteria for literature review

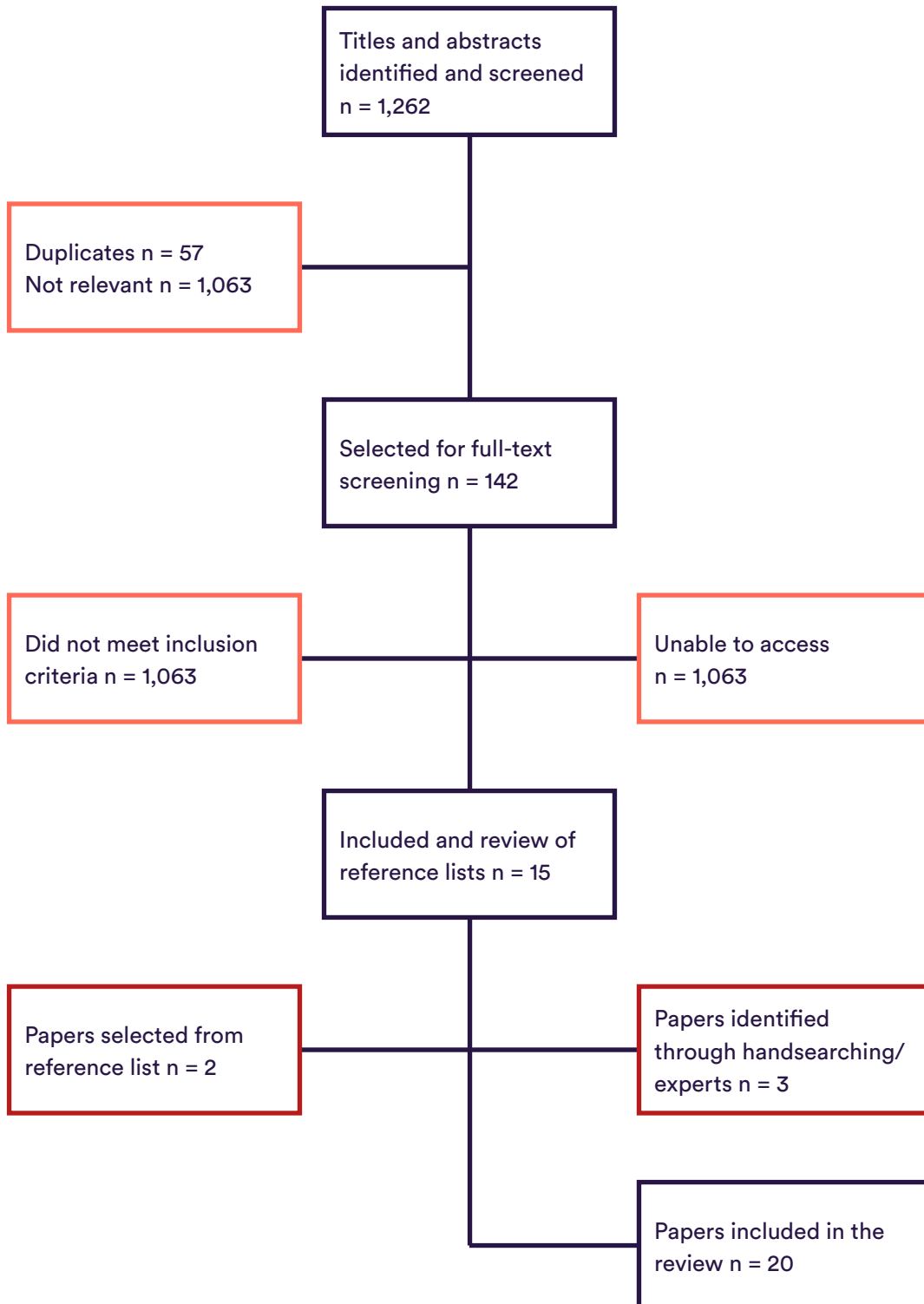|	Included	Excluded (papers exclusively about)
Topic relevance	✓ Focused on factors influencing **choice of, or preference towards, career**	✕ Career **progression** (i.e. when staying within same professional group) ✕ Retention of, or advanced training for, existing staff
Profession relevance	✓ **Non-medical clinical health careers** (including clinical support staff)	✕ **Doctors (i.e. medics)** ✕ **Non-clinical staff**
Methodology	✓ **Qualitative or quantitative** (including surveys, systematic reviews, literature studies, ethnographic studies and phonological studies)	✕ **Personal reflections** (i.e. not explicitly linked to research)
Setting relevance	✓ **Ireland or UK** (England, Wales, Scotland and Northern Ireland)	✕ **Study populations outside UK and Ireland**
Date	✓ **Published 2009 or later** (irrespective of whether it is based on pre-2009 data)	✕ **Pre-2009 publication date**
Population	✓ **Potential entrants to the workforce**	✕ **Current clinical students** (except where reflecting on attitudes before starting education) ✕ **Patients' attitudes to professions**
Language	✓ **English**	✕ **Not in English**

2 Results

Characteristics of the studies

There is a limited amount of research on attitudes towards non-medical careers. Our initial search identified 1,262 articles, although once articles that were not directly relevant were excluded, only 20 papers were included in the final literature review – this was the case even after including additional academic and grey texts identified by reviewing the references of relevant publications and recommendations from experts (Figure 4). A summary of these papers is included in Appendix B. The process of excluding papers revealed that a there was much literature that instead was:

- concerned solely with the quality of particular aspects of education or training programmes such as clinical placements, or local training initiatives

- concerned solely with progression or retention within an existing career pathway

- not empirical research, including personal opinions or reflections, news articles and policy commentary.

Figure 4: Literature review flowchart

Titles and abstracts identified and screened n = 1,262

Duplicates n = 57
Not relevant n = 1,063

Selected for full-text screening n = 142

Did not meet inclusion criteria n = 1,063

Unable to access n = 1,063

Included and review of reference lists n = 15

Papers selected from reference list n = 2

Papers identified through handsearching/ experts n = 3

Papers included in the review n = 20

Country

While the majority of the included studies covered England or the UK as a whole, some explicitly compared between nations, including with non-UK countries. Of the 20 papers included in the literature review, eight took place in England, with a further three from the UK as a whole. Four studies were based in Scotland, one in Northern Ireland and one in the Republic of Ireland. Two studies drew from research conducted in the UK and one other non-UK country (in these cases, the USA and Australia).

Methodology

The literature included a range of study designs covering surveys, interviews and focus groups. Nine of the papers included used a solely qualitative methodology, including focus groups, semi-structured interviews or a combination of the two, as well as essay analysis. Seven papers used a quantitative methodology (in the form of a survey or questionnaire), and two papers used mixed-methods (combining a questionnaire or survey with interviews and/or focus group discussions). Two papers were literature reviews that did not collect primary data.

Professions

The majority of the literature focused on nursing. Fourteen of the papers included in the review concerned nursing in general, while two focused on particular aspects of the nursing profession, namely community and learning disability. Only one paper focused explicitly on mental health nursing, and this drew on research from the UK and Australia. Three papers concerned non-medical careers aside from nursing – these were speech and language therapy (SLT), health visiting and the physician associate (PA) role. We only identified two papers relating to the three key professions of interest to the commissioners of the research – on mental health and learning disability nursing – with none relating to occupational therapy (Table 5).

Table 5: Papers specifically relating to mental health nursing, learning disability nursing and occupational therapy

Key profession of interest	Author (year)	Aim of study
Mental health nursing	Edward and others (2015)	To explore motivations towards considering mental health nursing as a career choice between student nurses on dedicated mental health nursing programme in the UK and a comprehensive nursing programme in Australia
Learning disability nursing	Genders and Brown (2014)	To explore from a practitioner point of view, the reasons learning disability nurses took up the specialism
Occupational therapy	None	N/A

Population

The populations that were the subject of the papers were varied, covering the following groups.

- **School students** – Studies covered various school age groups. Three papers were the result of a study in Scotland which conducted a survey and then interviews with school pupils aged 14–15 and 16–17 (Neilson, 2010; Neilson and Jones, 2012; Neilson and McNally, 2010). Other studies focused on female school pupils in Scotland aged 15–18 (Beattie and others, 2014), pupils aged 15–16 (Norman, 2015) and 17 year-olds (Mooney and Ford, 2009).

- **Current clinicians and those in education and training** – Studies also spoke to health care students and practising clinicians of various professions. This included mental health nursing students (Edward and others, 2015), student nurses (Dunnion and others, 2010; McLaughlin and others, 2010a; McLaughlin and others, 2010b), and physician associate students in England and the USA (Rizzolo and others, 2017). Price also focused on the attitudes of nurses and nursing students themselves (2009). One study which examined the motivations for entering learning disability

nursing interviewed 20 practising learning disability nurses (Genders and Brown, 2014).

- **Careers advisors** – One paper exclusively concerned career advisers as part of a qualitative study examining their perceptions towards the nursing profession and their role in nursing recruitment (Latham and others, 2013).

- **Multiple groups** – Sayer and colleagues (2016) and Litosseliti and Leadbeater (2013) spoke to health visitor and speech and language therapy students respectively, as part of their research around perceptions towards the careers, and included research with other groups including managers, teachers and careers advisers. In early 2019, The Open University published research from a survey of young people aged 18–24 (including people who were currently registered nurses, and people who were studying) about the barriers to entering the nursing profession (The Open University, 2019). Ali and Watson's (2011) literature review drew on literature regarding the public's attitude to nursing as a profession.

Population sample size

The majority of qualitative studies concerned small population sizes reaching between 20 and 40 participants through interviews and focus groups (Beattie and others, 2014; Genders and Brown, 2014; Latham and others, 2013; Neilson, 2010; Neilson and McNally, 2013; Norman, 2015).

McLaughlin and colleagues (2010a) conducted analysis of 68 essays. Two studies (Morris, 2010; Morris-Thompson and others, 2011) reached larger numbers of participants – 159 and 198 respectively. Both of these studies interviewed a range of people from different groups.

Larger numbers were reached through the surveys. Survey sizes ranged from 78 to 8,600 participants (Dunnion and others, 2010; Edward and others, 2015; McLaughlin and others, 2010b; Mooney and Ford, 2009; Neilson and Jones, 2012; Rizzolo and others, 2017; The Open University, 2019)

Subject matter

Nine papers considered attitudes and perceptions towards, or the wider image of, nursing (Ali and Watson, 2011; Latham and others, 2013; Mooney and Ford, 2009; Morris, 2010; Morris-Thompson and others, 2011; Neilson and Jones, 2012; Neilson and McNally, 2010; Norman, 2015; Price, 2009). The Open University (2019) aimed to understand barriers to entering nursing more generally.

Two papers examined the motivations of people entering nursing (Dunnion and others, 2010; McLaughlin and others, 2010a). Three papers examined the motivations of people entering other professions, namely physician associates (Rizzolo and others, 2017), mental health nursing (Edward and others, 2015) and learning disability nursing (Genders and Brown, 2014). Litosseliti and Leadbeater (2013) specifically considered the role of gender and gender discourse in speech and language therapy.

Three papers concerned specific initiatives to encourage particular careers – the Fast Track initiative for health visitors (Sayer and others, 2016), a pre-nursing scholarship (Beattie and others, 2014) and the role of work experience (Neilson, 2010).

Gaps in literature

Although the influence of gender is well discussed, no articles substantively explored the relationship between some key demographic characteristics – such as age, ethnicity, personal circumstances (e.g. family care commitments) or socio-economic class – and attitudes and choices of careers. As highlighted earlier, the majority of the literature focused on adult nursing (or nursing in general) and many occupations were not covered in the literature we identified.

Attitudes

Findings on attitudes and their determinants

As discussed earlier, the scope of the work excluded medical careers, so where we talk of clinical careers it should be assumed this does not include

doctors. It is also worth noting that the majority of the literature (and therefore the following findings) are focused on nursing – where other careers are discussed, we have endeavoured to specify this. This section of the report summarises the findings from the included studies, split into two sections:

1   Findings on the attitudes towards careers, starting with general attitudes on particular professions before highlighting where attitudes were specific to a particular aspect of the career including its status; role and day-to-day tasks; employment terms; education and training.

2   The influences behind these attitudes, covering the role of others, the media, personal motivations, and previous experience. The section concludes with a brief discussion on the relative importance of these determinants.

General attitudes

The general public opinion is that key clinical professions are societally valuable but still subjected to a poor image. A qualitative study across a range of groups suggested that the public perceive nursing to have real value, undertaken by people of principle who try their best, but that it is difficult and nasty work (Morris-Thompson and others, 2011). A study of 15–16 year-olds described nurses as "caring and helpful individuals" who are "respected by society", but in spite of this nursing was not viewed as a viable career option (Norman, 2015). Others suggested that nursing as a profession still suffers from a traditional and poor image in the public eye (Ali and Watson, 2011), mostly concerned with caring and nurturing tasks (Morris, 2010; Price, 2009). The situation may, in fact, be more extreme for mental health nursing:

> "It is widely accepted that nursing as a career is viewed favourably by society in that it is perceived as offering job security, mobility and career variety. While the same cannot be said for particular speciality streams of nursing, such as mental health nursing".
> (Edward and others, 2015)

Attitudes to specific aspects of clinical careers

The perceived status

While clinical roles are generally thought of as valuable professions, the perceived status and prestige of these professions (particularly nursing) as career options appears relatively low. A series of focus groups of careers advisors noted that positive images of nursing present "high standards of basic nursing and technical skills, patients treated with respect and care, senior roles largely autonomous" (Latham and others, 2013). However the literature around nursing, in particular, suggests that "the social status of nursing was seen as unimpressive compared with other professions" (Norman, 2015). Interviews with 15–16 year olds revealed that many would not consider nursing as a profession (Norman, 2015) and, within our included papers, there was some evidence suggesting parents will seek to influence their children to go for medicine instead (Neilson and McNally, 2010).

There is evidence to suggest that nursing is often seen as a fall-back career option. It is "viewed by some as a last-resort career choice if other options were not realised" (Norman, 2015), given the "exceptionally attractive alternative career options" (Ali and Watson, 2011). Indeed, five out of 20 learning disability nurses interviewed originally wanted to become teachers and after this ambition was not fulfilled, learning disability nursing was seen as a "more achievable goal" (Genders and Brown, 2014). Similarly, a further study noted that some people were suggested nursing only as a result of other "more glamorous" careers (in this particular case, air stewarding) being seen as "unavailable" to them (Genders and Brown, 2014). Other public sector jobs such as police officers, teachers and firefighters have also been viewed as "more preferable" than nursing (Mooney and Ford, 2009). We discuss later some of the determinants, including portrayal in the media, of the status that these careers hold.

For some, there appears to be a hierarchy in status between clinical careers, with medicine considered more attractive. The reflections on status are often made in reference to other professions and this includes other clinical careers. For example, one paper suggested nursing was viewed less favourably than medicine and physiotherapy (Norman, 2015), with another highlighting existing negative stereotypes that nursing was seen as a profession subordinate to doctors (Ali and Watson, 2011; Latham and

others, 2013). Even within professions, there can be negative attitudes towards particular aspects. For example, amongst 15–16 year-olds, community nursing was not seen as "real nursing" because it doesn't take place in a hospital (Norman, 2015).

The academic status

Nursing in particular is not seen as academic. A particular aspect of a profession's status is the degree to which it is considered 'academic'. For example, whereas medicine is viewed as "highly academic", one paper suggested nurses were seen "to 'only' care for patients, and seen as being less academic or intellectually able" (Norman, 2015). Failure to achieve the academic standards to enter their preferred career choice resulted in some students considering nursing as a career choice (Neilson and Jones, 2012). However, interviews of 15–16 year olds in Scotland – where training costs are often quite different due to the retention of the bursary for nursing – suggested that views on the educational requirements did not reflect the realities of the profession (Neilson and McNally, 2013).

Across the literature, it is apparent there is a trade-off with regards to the academic status of clinical professions, including whether they require a degree. Where clinical professions are not regarded as being particularly academic, they may be discounted as a career choice by high academic achievers (Norman, 2015), who "aspire to something better" or who consider nursing only if unsuccessful in other areas (Genders and Brown, 2014). On the other hand, seeking to increase the academic status may exclude some of the potential workforce pool. One factor affecting academic status is whether it is a 'graduate' profession. Some have argued that it is indeed preferable that nurses require a degree (Ali and Watson, 2011). Completing a degree as opposed to, say, a diploma would mean that they should be better able to demonstrate critical thinking, problem-solving and decision-making (Ali and Watson, 2011).

The role

Perceptions around the day-to-day tasks of nursing appear to be focused on the negative aspects of the roles. A study interviewing 15–16 year olds suggested there were negative views of nursing connected with the perception the role was around cleaning and 'blood'-related tasks (Norman, 2015). A

series of focus groups of careers advisors noted negative perceptions relating to examples of dealing with "mess and blood" and spending too much time on administrative tasks (Latham and others, 2013). There were also negative attitudes linked to a perception that nurses were viewed as subordinate to doctors, highlighting that there is still a perceived hierarchy between medical and non-medical careers (Ali and Watson, 2011; Latham and others, 2013).

The perceptions of clinical careers often bear little resemblance to the actual roles. A number of papers highlighted that young people's perceptions of clinical roles do not reflect the realities of the profession. This applied to nursing, in particular community nursing (Norman, 2015), and to speech and language therapists (Litosseliti and Leadbeater, 2013). A qualitative review of a range of people, including careers advisors and children from 7 to 17 concluded that there is little awareness of what nurses actually do and are, and that this influences career decisions (Morris-Thompson and others, 2011).

There is also limited awareness of the differences between roles. One paper suggested people are often unable to differentiate between a support worker, care assistant and a registered nurse and had a lack of knowledge about extended roles and responsibilities (Ali and Watson, 2011). One article based on research in Scotland suggests that the placements offered to school pupils can be a contributing factor (Neilson and McNally, 2010). This article found that school pupils perceived that most placements offered were not representative of nursing work. The interviewed students noted that most places were provided in care homes for elderly people, mainly run by carers with no nursing qualifications.

Perceptions around working conditions appear to have a negative effect on the attitudes towards careers, although career flexibility in particular appears to be a draw. Focus groups with careers advisors revealed their perception that nursing involves unsocial hours and can be stressful (Latham and others, 2013). A survey of a thousand young people aged 18–24 who considered nursing found that around a quarter (24%) gave 'working hours' as a reason for opting against a career in nursing, with the same proportion also citing 'perceived pressure' (The Open University, 2019). This tallies with interviews of 15–16 year olds in Scotland who expressed negative perceptions related to shift work and poor working conditions (Norman, 2015). In turn, one study which focused on other non-medical health

professions observed that working conditions can have a positive effect on attitudes and choices towards careers. Rizzolo and colleagues (2017) found that the flexibility and ability to change specialty are primary reasons why students choose to become physicians' assistants.

The employment terms

Perceptions around the low pay of some non-medical professions are cited as a reason for people finding a potential clinical career less attractive. The literature includes general perceptions of clinical professions (with the exception of doctors) not being well paid, including nurses (Ali and Watson, 2011; Morris-Thompson and others, 2011), and speech and language therapists (Litosseliti and Leadbeater, 2013). Similarly, some negative attitudes seem to derive from the perception that there are limited career prospects (Ali and Watson, 2011). However, interviews of 15–16 year olds in Scotland suggested that views of career pathways and opportunities in nursing did not reflect the realities of the profession (Neilson and McNally, 2010).

Education costs and requirements

Many appear to be put off clinical careers due to the financial costs and requirements of training. A survey of a thousand young people aged 18–24 who considered nursing highlighted that the perceived nature of training may be negatively affecting attitudes. In particular, a third (33%) cited 'costs' as a reason for opting against a career in nursing, with lower levels citing 'travel' (13%) and entry requirements (11%) (The Open University, 2019). That said, the level of understanding of education requirements might be limited in the case of both students (Norman, 2015) and careers advisors (Latham and others, 2013).

Determinants

The role of others

Overall, the influence of others in determining attitudes towards clinical careers is relatively well covered in the literature. However, the extent of the effect is mixed. There is a considerable amount of literature on the role

of parents, relatives, tutors and careers advisors. One study looked at the influence of parents, guidance teachers and careers advisers. They concluded that only the negative views of careers advisers made it less likely that students would choose nursing (Neilson and Jones, 2012).

A survey of a thousand young people aged 18–24 who considered nursing found that only 6% gave 'third party advice' as a reason for opting against a career in nursing (The Open University, 2019). Role models (i.e. people who work within the health care profession) were also cited as an influence on the desire to study nursing, although this was both positive and negative (McLaughlin and others, 2010a).

Influence of parents and relatives

Relatives can have a notable impact on attitudes towards clinical careers. For example, a study of high academic-achieving 16–18 year old pupils in Scotland who had considered nursing as a possible career choice but later decided to pursue medicine or another health care profession revealed the negative influence of parents (Neilson and McNally, 2010). The parental influence may take the form of either direct advice to go for a specific career or through the pupils feeling that they may ultimately be letting their parents down, for instance by not using their skills. Family influence was cited as the main influence on attitudes towards nursing (and specifically community nursing) for 15–16 year old pupils (Norman, 2015) and as a factor affecting the motivation to do speech and language therapy (Litosseliti and Leadbeater, 2013). In that study young people had "for the most part" followed the advice given or had, at least, considered these discussions. Similarly, family and friends were found to influence attitudes towards adult nursing in general but not to the particular aspects of the learning disability specialty (Genders and Brown, 2014). However, one study suggested that parental views were not predictive of nursing as a career choice (Neilson and Jones, 2012).

Parents and relatives may have limited understanding of clinical professions other than medicine and – even where they are a health care professional – their views can be negative. Parents perceived nursing as being too difficult, too menial and low paid, and that nurses have little drive or ambition (Morris-Thompson and others, 2011). One study noted that where participants whose family members were in the nursing profession, all had

negative opinions from conversations and generally received advice against going into nursing (Norman, 2015), highlighting that views of people within the profession towards their career choice and its suitability for others are also relevant. More generally, one study suggested that nurses can be blamed for not contributing enough to uplifting the image of the profession (Ali and Watson, 2011).

Influence of tutors and careers advisers

Careers advisers appear to affect individuals' career decisions, although there was little to suggest they are proactively seeking to improve perceptions of some clinical roles. Perceptions of nursing amongst careers advisers are mixed, with some regarding it as a "well-respected, rewarding career with dynamic career progression, job security and a good starting salary" (Latham and others, 2013) while others held it in low regard due, for instance, to its academic status and difficult working conditions (Latham and others, 2013; Neilson and Jones, 2012). Further, a negative view regarding nursing as a career choice from their careers adviser appears to make it less likely that the pupil will choose nursing (Neilson and Jones, 2012). Another article also found that high-achieving academic students felt that school teaching staff that organised work placements in their schools actively placed barriers in their way and were generally unhelpful regarding work experience in nursing (Neilson and McNally, 2010)

Some careers advisers have a lack of awareness of clinical roles and can have biased views on who would be suitable candidates. Amongst some careers advisers there is a lack of awareness and understanding about the practicalities surrounding studying nursing such as the entry requirements, and the particular subjects or grades that are required (Latham and others, 2013). Similarly, a further paper noted careers advisers had poor understanding of the benefits and rewards of nursing and the opportunities and diversity within the career (Morris-Thompson and others, 2011). There is also a lack of understanding about the potential progression and remuneration that the career offers once qualified. Furthermore, in the context of speech and language therapy, one study noted that careers advisers considered that profession to be gendered, perceiving males to be more inclined to place importance on salary and job prospects (Litosseliti and Leadbeater, 2013). Note that we discuss gender in more detail later. In

this study, however, practising speech and language therapists were less likely to mention these factors as influencing their career choice and instead highlighted things such as an interest in the subject.

Media

Attitudes towards careers appear to be affected by either a lack of awareness or stereotypes, which has been attributed, in part, to inaccurate representations in the media. The impact of the media appears important: students refer to media imagery when discussing attitudes towards certain careers (Norman, 2015). However, media influence on nursing, in particular, appears generally negative (Latham and others, 2013), or at least inaccurate. Norman (2015) recognised that nurses are often portrayed as people who work in hospital, rather than as working in other settings or roles (e.g. in community settings). Furthermore, where media coverage does exist, it often highlights examples of bad practice or poor quality care, which has "fuelled public unease" (Norman, 2015). There were some positives – including generally portraying nurses as kind individuals (Norman, 2015) – but there were also misconceptions, with one paper noting that nurses continue to be portrayed in the media as a sex symbol or a doctor's subordinate (Ali and Watson, 2011).

> "A recent television advertisement in the UK for shampoo portrays a man taking a shower and imagining himself surrounded by nurses in traditional (short) uniforms and the long-abandoned (in the UK) nurses' hats. The relationship between nurses and shampoo is not clarified."
> (Ali and Watson, 2011)

Negative media on quality of care may have had an impact on perceptions. Recent media reports on 'poor standards' of care and suggestions that nurses lack 'care and compassion' seem to have fuelled public unease, challenging traditional beliefs of nursing as a trusted and caring profession (Francis, 2012, cited in Norman, 2015).

Personal motivations

Altruism

A motivation to pursue an altruistic career appears a positive influence on attitudes to clinical careers. A survey of a thousand young people noted that more than a quarter (27%) said that they want a profession that enables them to help people (The Open University, 2019). Focus groups of young people (15–18 years) in Scotland suggest that this altruistic tendency can perhaps be influenced and exposure to 'sad stories' appeared to increase desire to become a nurse (Beattie and others, 2014). Similarly, the analysis of a survey on student nurses' educational preparation for mental health nursing suggest that immersion in a mental health setting may develop into a possible desire to make a difference to people who live with mental health problems (Edward and others, 2015). Others felt that becoming a nurse was "their duty" (McLaughlin and others, 2010a).

Development and other personal motivations

Opportunities for self-development may also be an important determinant. Focus groups with nurses revealed that when describing the benefits of being a nurse, the term 'fulfilment' was frequently used (Morris-Thompson and others, 2011). The altruistic desire was also noted among health visitors on a fast track initiative in England. One study found that a key motivator to choose this career was the potential to put 'policy in practice' more directly than other roles for nurses and midwives as well as the potential to 'make a difference' to the lives of the local community (Sayer and others, 2016). Two studies discussed the desire for personal development alongside the motivation to care for others as a factor influencing attitudes to studying nursing (Dunnion and others, 2010; McLaughlin and others, 2010a). One study found that the opportunity for self-development may be just as important as the desire to care (McLaughlin and others, 2010a).

Personal motivations are numerous and complex. In the context of decisions to pursue a career in speech and language therapy, individuals displayed different personal motivations and interests that affected their career choice. These may include an interest in the subject matter – languages and sciences – but, for this profession there appeared to be motivations relating to career flexibility, including the ability to take a career break to have a family (Litosseliti and Leadbeater, 2013).

However, for some the motivating factors are insufficient to overcome the barriers. A survey of young people on one such profession – nursing – found that three in ten (30%) young people (aged 18–24) considered becoming a registered nurse, but ultimately opted against it. A comparably sized survey, albeit limited to 16–18-year-old students in Scotland, found that a similar proportion (28%) would ever consider nursing (Neilson and Jones, 2012). Around one in six (17%) believe that nursing is a rewarding career choice but that these motivating factors are not enough to overcome the barriers that exist to entering the profession (The Open University, 2019).

Previous experience

Exposure to care appears to be a positive influence on the likelihood of pursuing a clinical career. Furthermore, it can affect the specialty chosen. As noted earlier, people often had only limited frame of reference for reflecting on some clinical careers (Norman, 2015). This suggests that even limited exposure to the profession could potentially have a material impact. This appears to be borne out in the context of speech and language therapy where exposure to that profession, including personal experience of family receiving such therapy, was discussed "by all participants" in one study (Litosseliti and Leadbeater, 2013). Similarly, personal experience of care as a result of "major life events" such as being a parent in a hospital setting can also have an impact (Genders and Brown, 2014). This finding has been identified in mental health specific professions; 'personal experience' was the most cited – by nearly half of UK students (48%) – as the main motivational factor for choosing or not choosing that career:

> "A personal experience of mental health (such as a relative with a mental illness or experience in working with people who experience mental illness) enhanced student motivation for opting for a career in mental health nursing"
> (Edward and others, 2015)

Experience of working with people with learning disabilities (and having colleagues with learning disabilities) can also have an impact on a person's attitude to a particular career, particularly if they make the decision later on in life and decide to specialise later. This exposure also helped to challenge pre-conceived ideas that participants had on the role (for example, what was involved) as well as specific characteristics of people who would be involved (for example, gender stereotypes) (Genders and Brown, 2014).

Experience of the actual roles generally has a positive effect on attitudes towards that clinical career. One study suggested that a pre-nursing scholarship helped secondary school pupils in Scotland to decide whether to pursue a nursing career by providing an opportunity to explore their ability, suitability and desire for nursing. Perceptions of the life and work of a student nurse and their future career shifted through the scholarship, especially during practice learning experience, and the scholarship also affirmed ability and suitability to nurse (Beattie and others, 2014). A further Scottish study on high academic-achieving pupils in Scotland who had considered nursing but rejected it in favour of other health careers found that work experience in nursing could be influential in making nursing more attractive as a career choice. However, they noted barriers too, including difficulty in obtaining appropriate work experience due to teachers' attitudes towards nursing careers and students considering that they were not being given proper nursing work experience exposure – instead being placed in a nursing home or a care home (Neilson, 2010).

Personal characteristics

Gender is likely to have a material impact on attitudes towards certain clinical careers. Attitudes to some clinical careers appear to be highly influenced by gender; for example, one study found female students were nearly four times more likely to consider nursing as a career choice (Neilson and Jones, 2012). The literature gives some explanations for this including:

- the prevailing discourse around women as carers, nurturers and communicators. This was raised in the context of speech and language therapy whereby the discourse perpetuated the perception that the profession is 'women's work', in particular the use of the word "therapist" as having female connotations (Litosseliti and Leadbeater, 2013)

- where a profession is already dominated by a particular gender, then exposure may only perpetuate or reinforce the image of the profession being 'for' that gender (Litosseliti and Leadbeater, 2013)

- differences in motivations between genders with, for example, one study suggesting males are more affected by salaries (Litosseliti and Leadbeater, 2013)

- stereotypes with, for example, a common view that 'nursing is a feminine profession' (Ali and Watson, 2011)

- the observed gender bias inherent in nursing education may contribute to it being a less appealing choice for some (McLaughlin and others, 2010b).

Perceptions around gender vary by specialty, with some evidence that a mental health specialty might be considered more gender neutral compared to related professions. A study on 384 nursing students from a UK university suggested that the more gender-neutral career options included mental health, accident and emergency, learning disability, theatre, surgical and medical nursing, as well as nurse teaching and management. In contrast midwifery, school nursing, district nursing, health visiting, paediatric nursing, and practice nursing were considered more 'feminine' career options (McLaughlin and others, 2010b).

Age

The time in people's lives when a decision is made can also be an influencing factor for determining attitudes. This may be particularly relevant for professions with a high proportion of mature students (Genders and Brown, 2014). For example, where people had had prior careers (such as teaching or social work), their decision to change career and become a learning disability nurse came later, and was influenced by multiple factors, some of which have been described above. This included greater exposure to people with learning disabilities, major life events such as caring for a parent or child and influence of tutors whilst studying for a different course (Genders and Brown, 2014). The opportunity to gain "coping skills to handle the responsibilities of being a nurse" as well as life skills were also given as relevant factors to making a decision about the career later on in life (McLaughlin and others, 2010a).

Relative importance of determinants

Most studies looked at a small number of determinants rather than across a range, but some broader studies draw out the relative importance of the different influences. One recent survey of young people (18–24 years) who considered nursing suggested the cost of training was significant (33% cited it as a reason for opting against a career in nursing). Many respondents

also highlighted the importance of working conditions (24% citing working hours and 24% perceived pressure) while few opted against it due to entry requirements (11%) or third party advice (6%) (The Open University, 2019). One study that analysed the reasons for students choosing a physician associate career found that among the different response options provided, 'working with people' was the strongest-held reason. However, others have highlighted personal interest or career flexibility as the main motivation. With specific professions tending to attract different groups of potential people, there is strong reason to assume that even the broad balance of priority of determinants varies by staff group (Litosseliti and Leadbeater, 2013).

One study noted that "wanting to help and care for people" was given as the main reason for applying for a career in nursing, although there were other influencing factors as well (Dunnion and others, 2010). Another also noted numerous factors as having an influence, but importantly that opportunities for personal development were seen to be "just as" important as altruistic motivations, and this was important for informing future recruitment campaigns (McLaughlin and others, 2010a).

3 Discussion

The search strategy identified 1,262 articles. After initial screening of titles and abstracts, 1,120 were excluded for being duplicates or for not sufficiently addressing the research question. Full-text screening of the remaining 142 articles produced 15 articles satisfying the inclusion criteria with a further 5 added from hand-searching, expert suggestions or reference lists. As such, 20 articles (as summarised in Appendix B) were included in the review. These included both quantitative studies – primarily cross-sectional surveys – and qualitative research, including focus groups and interviews. Our synthesis of the literature identified a range of themes around the attitudes and their determinants, covering:

- a person's background (e.g. gender, skills)
- their psychological or personal influences (e.g. earlier experiences)
- cultural or environmental influences (e.g. the media).

Generalisability to mental health careers

The vast majority of the research was not specific to mental health careers. Therefore, our approach was to look at *all* non-medical clinical careers, and draw out where possible the implications for non-medical mental health careers.

Based on the research, we have highlighted some key factors that may be particularly relevant for mental health careers in Table 6. While many of the themes drawn out in the findings will be relevant to mental health careers even where the underlying evidence was for all non-medical clinical careers, such generalisations need to be treated with caution.

Table 6: Key factors that might affect specifically mental health careers

The perceived status	Despite initiatives to achieve 'parity of esteem' there is enduring stigma surrounding mental health, in comparison to physical health conditions. These negative perceptions and opinions around mental health, in relative terms, might be transferable to the attitudes and choices of a mental health as opposed to a physical health career.
	Available evidence suggests that social/public stigma on mental health can lead to negative stereotypes of those with mental health problems, marking them as different, less worthy of care or more difficult to care for when compared with those with physical conditions. These negative stereotypes might lead students (as well as their significant others) to have less interest in mental health as a future career, or feelings of less readiness for the role. The nature of these stereotypes might also lead to a perception that caring for mental health patients can be emotionally challenging, with little opportunities for instant gratification.
The role	There are a multitude of different non-medical mental health careers. In itself, this diversity can mean the general population may not be familiar with the variety of options, and the difference between them, potentially causing confusion about, and even less interest in, these roles.
	Many of the roles also differ in terms of entry requirements, education and training and career progression compared to, in particular, adult nursing (or nursing in general) which was the focus of the majority of the literature in this review.
Exposure	Early exposure to mental health services (and so careers) may be less likely than other clinical careers. Despite the high prevalence of mental health conditions, it is still a far smaller sector than physical health services. In addition, diagnoses and treatment of relatives are less likely to be shared to young individuals than for physical conditions. As a result, young people – in particular – may have significantly lower awareness of mental health careers and their value. That said, one paper noted the choice of mental health nursing is more likely to be influenced by prior experience (along with occupational therapy and adult nursing) compared to other non-medical health programmes (Miers and others, 2007).

Age	Age is likely to have a distinctive influence on choosing a career in mental health, as evidence suggests that mental health nursing is a more common choice among more mature students than other strands of nursing (Council of Deans of Health, n.d.). Indeed specialising in mental health nursing (as with learning disability nursing) is less likely, according to one article, to be a career choice made in childhood (Barriball and While, 1996). Related to the comment above on 'exposure', available evidence suggests that this might be related to the probability of older students being more aware of mental health roles and what they mean as well as to feeling higher levels of readiness for the role.
Gender	Evidence suggests that non-medical mental health careers, specifically mental health nursing, are more appealing to male students (Fielden and Burke, 2014). There is also evidence to suggest that mental health nursing (as with, for example, learning disability nursing) is considered more gender neutral compared with many related professions (McLaughlin and others, 2010b).

Strengths

This research updates on and adds to the existing literature on attitudes towards non-medical clinical careers. By selecting similar settings, the findings should – within reason – be applicable to the country of interest, England. Moreover, despite the short timeframe for the work, the literature search appears to have been more successful in identifying relevant research for synthesising than previous similar work. For instance, the authors of *Why not nursing? A systematic review of factors influencing career choice among healthcare students* (Wu and others, 2015) included any nation over an 11-year period but identified only two papers which would have met our inclusion criteria.

Limitations

A key limitation to the work is that it relies on diverse and often small studies. The literature was relatively small in number and there is a risk of publication bias affecting the balance of our synthesised findings. Furthermore, each of the individual studies has a range of limitations, including:

- pragmatic decisions around the setting of the research leading to it focusing on an urban setting (Norman, 2015)

- a biased sample of students, with some selected by the head teacher (Norman, 2015)

- small numbers of participants in certain studies (Beattie and others, 2014; Litosseliti and Leadbeater, 2013).

Given the limited research in this area, we also took some pragmatic decisions around the inclusion criteria for papers to try to ensure that we weren't excluding potentially interesting articles. In particular, we included papers where the data was from before 2009 so long as it was published after 2009. Similarly, we also included one paper without any systematic or primary evidence presented on the basis that while largely an opinion piece it was grounded in some selected published literature (Ali and Watson, 2011). It is also worth considering that due to the time of publication of most of the articles included in this review, the potential effect of more recent campaigns and efforts in changing the image of nurses and of mental health conditions in general or the narrative surrounding these professions might not be reflected.

Previous and current campaigns and policies

In reviewing the literature on attitudes towards non-medical careers, we identified a number of articles which discussed specific campaigns and initiatives designed to address recruitment issues. Where relevant, we sought to draw out insights regarding their nature, target and, if available, impact with regards to influencing attitudes towards particular careers. This is not intended to be an exhaustive list but rather a summary of some of the key insights drawn from literature that was excluded from our final list of articles.

In recent years, there have been numerous campaigns and policy initiatives designed to address NHS recruitment challenges. Particular clinical specialties have been subject to direct campaigns or promotions, such as psychiatry ('Choose Psychiatry', n.d.). For non-medical careers, nursing appears to have been a particular focus. For example, the recent 'We are the NHS' campaign has the strategic aim of reducing vacancy rates within nursing (Ford, 2018a). One of the key aims of this campaign was to recruit more nurses into the NHS

by increasing applications to degree courses. Spotlights within this campaign are planned for mental health and learning disability nursing specialties.

The determinants of people's career choices identified in the literature can also be seen in these campaigns. These include the person's exposure or experience to a particular profession, as well as their own perceptions. Some campaigns and initiatives have tried to specifically address these through, for example, enabling individuals to experience what the profession is like first-hand or creating a more positive and realistic image of nursing.

Some initiatives have specifically focused on distinct audiences, reflecting the particular influences on decision-making depending on the person's age or stage in their career. Health Education England's 'Step into the NHS' project provides a range of resources for pupils at various age groups to raise awareness and understanding of the different NHS careers that may be available to them (Ford, 2018b). Early years education has also been targeted in a project led by NHS Grampian, which aims to influence very early perceptions of nursing amongst children, by challenging gender stereotypes and outdated views of the profession (Ford, 2018c). NHS Employers's 'Think Future' project is specifically aimed at supporting NHS organisations to recruit young people into numerous NHS roles, and provides resources for Human Resources and Communications teams as well as managers (Think Future, n.d.). Financial initiatives such as the 'earn and learn premiums' have been targeted specifically at mature students who want to study mental health and learning disability nursing (NHS Long Term Plan, 2019).

Local areas have also introduced specific recruitment initiatives or programmes. For example, 'CapitalNurse' aims to support the nursing workforce in London to be sustainable and high quality through encouraging more people to study and work in London, and promoting the opportunities that exist in the capital. NHS England's 'Ambassador' programme also aims to use local ambassadors to act as champions for the profession who can then visit schools and encourage young people to consider nursing (and in this case midwifery) as a career (Ford, 2018d).

This is not an issue unique to the NHS. 'Nursing Now' is a three-year collaboration between the International Council of Nurses and the World Health Organization that aims to raise the profile and status of nurses

worldwide. This is aligned with the World Health Organization's 2020 'International Year of the Nurse and Midwife' ("What we do," n.d.)

Comparison to older literature

Judging from pre-2009 literature, it appears that some of the themes we highlight here have proved persistent. For example, our findings echo earlier studies that highlight the perception that nursing is a female job (Evans, 2004; Hemsley-Brown and Foskett, 1999; Keogh and O'Lynn, 2007; Seago and others, 2006) and that the primary reason for choosing nursing as a career was the desire to 'care for others', 'help people' and 'make a difference' (Andersson, 1993; Beck, 2000; Maben and Griffiths, 2008; Mackintosh, 2006; Mooney and others, 2008) remain prevalent in the most current literature on attitudes towards nursing careers. However, the studies in our review appear to have more of an emphasis on the specialised skills, knowledge and decision-making components of nursing practice as well as on the academic requirements of being a nurse (Mooney and Ford, 2009; Morris, 2010; Morris-Thompson and others, 2011; Neilson and McNally, 2013; Price, 2009). In fact, many of the recommendations described in the reviewed studies are specifically focused on updating the image of the nurse among the public.

Many of the reviewed studies published before 2009 collected data from undergraduate students or in a pre-qualifying professional programme (Brodie and others, 2004; Miers and others, 2007; Mooney and others, 2008). In contrast, many of the recent articles focused specifically on individuals before entering higher education (i.e. school pupils) (Beattie and others, 2014; Neilson, 2010; Neilson and Jones, 2012; Neilson and McNally, 2013; Norman, 2015; The Open University, 2019).

Lastly, in terms of the role of others on career choices, previous studies have been contradictory in their findings. Some studies suggest that family influences play a large part in developing children's thinking about life choices (Mendez and Crawford, 2002; Miller and Cummings, 2009), while others suggest that this is only one element of a large range of influencing factors in career choice (White, 2006). Our review suggests that this uncertainty remains, with other papers suggesting a significant influence from others, while a survey of those that considered nursing suggested this was only a minor factor in their decisions (The Open University, 2019).

Recommendations from literature

All reviewed articles proposed recommendations. In most cases, these focused on strategies to inform future promotional campaigns that can help address the recruitment of students into non-medical careers, targeting policy stakeholders in general, as well as health education institutions and NHS employers. Only a minority of articles point to the need for further research.

The need to improve the image of nursing in society, both in general terms as well as of those nursing branches in particular shortage, such as learning disability nursing, was perhaps the most common theme – the implication being that how society perceives nursing work and the profession in general influences the appeal of nursing as a career choice. Some proposed promotional campaigns that draw attention to the career's benefits, prospects, and potential for fulfilment (Mooney and Ford, 2009; Morris, 2010; Morris-Thompson and others, 2011). Others argued for campaigns that include the portrayal of nursing in a more realistic and contemporary manner (Latham and others, 2013; Price, 2009), updating information of nursing as a career choice and ultimately re-educating the public.

The need to increase the exposure to careers was also proposed by many of the authors, including in the context of mental health nursing. Among the most common strategies provided were using role models or ambassadors (Genders and Brown, 2014; Latham and others, 2013; Morris, 2010; Morris-Thompson and others, 2011; Neilson and McNally, 2010; Norman, 2015; Price, 2009) and creating opportunities for young students to have pre-professional experiences such as work placements (Beattie and others, 2014; Morris, 2010; Neilson, 2010). Both strategies were presented as routes to foster a better understanding of the role, develop empathy and socialisation into the career. In most cases, these strategies referred to exposure of young individuals to nursing in general, with the exception of three articles that focused on specific branches of nursing – community nursing (Norman, 2015), learning disability nursing (Genders and Brown, 2014) and mental health nursing (Edward and others, 2015) – and one that focused on raising the profile of speech and learning therapists among male students (Litosseliti and Leadbeater, 2013).

Many recommendations were directed towards the role of others in influencing career decisions. Although most of these recommendations

aimed to influence career decisions among school pupils and the young population in general, a key target of these recommendations, and of many of the proposed promotional campaigns, were school career advisers (Latham and others, 2013; Morris, 2010; Neilson and Jones, 2012; Neilson and McNally, 2010; Norman, 2015) and school pupils' parents and significant others (Genders and Brown, 2014; Neilson and McNally, 2010; Norman, 2015).

A few studies noted the importance of the current workforce in raising the profile of their profession. These articles explained that nurses also have a role in how the profession's image is communicated, as they can contribute to promote the profession's high standards (Morris, 2010; Norman, 2015; Price, 2009). Others recommended ways of raising the status of professions; for example, one article referred to raising the level of education for nurses from diploma to degree to uplift image of nursing in general (Ali and Griffiths, 2012) and another one noted improving aspects relating to their working conditions, particularly staffing and workloads (Morris, 2010).

Other aspects noted among the recommendations in the included articles referred to increasing the collaboration and input of nursing faculty and nursing departments in higher education institutions when designing and disseminating placements (Neilson, 2010), promotional campaigns that make better use of available marketing tools and technology, and developing liaison with the media to disseminate career prospects and opportunities (Latham and others, 2013; Norman, 2015; The Open University, 2019).

Further implications

Some of the issues around attitudes have arguably arisen as a result of a failure to embrace positive changes within professions. Addressing these changes should therefore be a matter of urgency. For example, while education policy in the UK has for over 20 years encouraged people to aspire to graduate professions, nursing and other allied health professions have tended to only require degree-level education more recently. Despite this shift, it does not yet seem that the image of nursing is consistent (Norman, 2015), although there does seem to have been a shift in image since the publication of the majority of research included in our review. An outdated view of nursing may have contributed, for instance, to the perception of nursing as being a less academic, vocational pathway (Harmer, 2010; Norman, 2015). However,

data does suggest that amongst the general public, nurses are viewed as a trusted profession (Gilroy, 2019). This may be important and useful for future campaigns to consider.

Mental health services and their workforce are also continuing to change with, for example, a shift to provision in the community. In recent years, there has also been a much greater focus on mental health at a national policy level, including the introduction of new roles. However, it is not clear what, if any, impact this is having on attitudes towards mental health careers. General understanding of health care roles in the community may be poor compared to hospital jobs (Norman, 2015) and, therefore, more needs to be done to increase awareness of these emerging roles and what they entail.

Responsibility for improving attitudes towards non-medical careers falls across a range of organisations. Our review of campaigns and policies highlighted a range of initiatives across local, regional and national bodies. More broadly, the images of these careers that are presented often do not reflect the intention that has been proposed by the Nursing and Midwifery Council (NMC) and Department of Health (DH), of a "well-educated, competent, skilled, compassionate individual who leads innovative and evidence-based practice" (Norman, 2015) and these organisations clearly have a stake in improving the situation.

Further consideration of the gendered nature of professions also needs to include emerging information on the extent of pay and progression equality. For example, the Nuffield Trust and others recently highlighted new data that shows around nine out of ten NHS organisations in England had a median hourly pay gap that favoured men (Beech and others, 2019). Moreover, the considerations of gender imbalance in professions also needs to consider wider discourses around perceptions of 'women's' and 'men's' work" (Litosseliti and Leadbeater, 2013). Stereotypes appear powerful and seem to have a particular effect regarding gender with, for example, men tending to avoid careers such as nursing due to their stereotypical association with women (McLaughlin and others, 2010b).

"Interestingly when we examine the history of men in nursing… there are accounts of men as nurses dating as far back as the Byzantine period, in Biblical accounts and through the Middle ages."
(McLaughlin and others, 2010b)

The findings regarding the positive impact of work experience, and specifically well-designed placements, have broader policy implications on the offer made to school students. Work experience has long been a feature of the UK school curriculum. However, the responsibilities, accountability, breadth and quality of such placements remain unclear (Neilson, 2010). It has previously been suggested that work experience opportunities are better organised in other countries (Ryan, 2001). This has implications for the Department for Education.

There is also evidence that the requirements and financial costs of training may be a significant determinant and yet, historically, these have been poorly understood (Latham and others, 2013; Norman, 2015; The Open University, 2019). Given the relatively recent changes to the funding for some routes for training as a clinician, the risk of misconception is particularly high and, as such, there is probably scope to promote better awareness of these requirements and costs. This should include a clarification of how these requirements and costs differentiate among the wide range of non-medical clinical mental health careers (see Table 3).

All commentators need to be aware of the unintended consequences of focusing on negative health care stories. In particular, there is a risk that by campaigning to improve conditions for current staff, potential future staff are being put off. Media influence is typically negative, with bad experiences generally portrayed more than good. This can increase public awareness of dissatisfaction with pay rates and working conditions (Latham and others, 2013).

Concluding remarks

There is very limited literature on attitudes towards non-medical clinical mental health careers. While many of the themes drawn from the general literature on non-medical careers will be relevant to mental health careers,

such generalisations need to be treated with caution. As such, it appears that there is scope for further research on attitudes and choices towards mental health careers specifically and also on clinical professions other than nursing, which constituted the majority of the research.

It is concerning that while there appears to be a general view that these clinical roles are valuable to society, the attitudes and perceptions towards the professions as a career choice, as described in the literature, tend to be negative – particularly in comparison to medicine – and demonstrate a limited understanding of the actual roles or the differences between roles. Efforts to address this need to focus on both the potential health care worker directly and others who influence their decisions, including relatives and careers advisers.

Overall, the findings suggest that attitudes towards career choices are influenced by a complex combination of three main groups of determinants: the individual's own characteristics and motivations; the individual's primary group of influence, primarily parents, close friends, school teachers and advisers; and the wider and more general views of non-medical professions in the media and society. Given the scale of the workforce crisis, it is imperative that wide-ranging efforts are made to influence these determinants – hopefully using, in part, the insights from this review – and that this is done as a matter of urgency.

Appendix A: Methodology

Desk-based work

Prior to conducting the literature review we undertook a mapping exercise to identify mental health careers that are currently available within the NHS. The output from this is presented above in Table 3. The purpose of this exercise was to outline the existing roles, including details about the education and training requirements. We also undertook a rapid review to identify a sample of past and present NHS recruitment campaigns and initiatives aimed at individuals considering a non-medical career within the NHS. We supported this work through scoping conversations with key individuals at Health Education England and the Royal College of Nursing to provide insight and context to the work.

Literature review

A literature review was conducted to identify research around attitudes towards non-medical, clinical careers in the NHS. The literature search strategy was developed iteratively with support from the University of Birmingham's HSMC library and information services, and drawing on prior related literature reviews (Glerean and others, 2017; Kennedy and others, 2014; van Iersel and others, 2016; Wu and others, 2015; Yi and Keogh, 2016) (Yi and Keogh, 2016). Full details of the search strategy can be found below. For the academic literature review, six databases were searched: HMIC, PsycINFO, Medline, ABI, CINAHL and Web of Science. These were searched for papers from the UK or Ireland, in English language and published since 2009.

All titles and abstracts identified were screened on the basis of our inclusion and exclusion criteria (given in Table 4), to identify studies with the greatest relevance to attitudes towards non-medical, clinical careers within the NHS.

Some papers were screened by more than one reviewer to ensure consistency and all were discussed by the team of reviewers.

Database	Keywords
HMIC	"career plans" or "career choice" or "occupational choice" or "career$ preference$" **AND** ([All words around UK, England, Wales, Scotland etc or Ireland] and Health) OR NHS}
PsychInfo	"career plans" or "career choice" or "occupational choice" or "career$ preference$" **AND** {([All words around UK, England, Wales, Scotland etc or Ireland] and Health) OR NHS}
Medline	"career plans" or "career choice" or "occupational choice" or "career$ preference$" **AND** [All words around UK, England, Wales, Scotland etc, and Ireland **OR** NHS] **AND** [Synonyms for non-medical clinicians] **AND** Health
ABI	Career **AND** {([All words around UK, England, Wales, Scotland etc or Ireland] and Health) OR NHS}
CINAHL	"career choice" or "career planning" or "career exploration" or "occupational choice" or "career preference" **AND** {([All words around UK, England, Wales, Scotland etc or Ireland] and Health) OR NHS}
Web of Science	"career plans" or "career choice" or "occupational choice" or "career preference" **AND** {([All words around UK, England, Wales, Scotland etc or Ireland] and Health) OR NHS}

The synonyms for UK involved a complex set of geographical names developed by Birmingham University's Health Services Management Centre library. For non-medical clinicians the following search string was used:

Nurs$ OR Health visitor$ OR (Healthcare AND Support worker$) OR Paramedic OR Midwi$ OR Chiropod$ OR Podiat$ OR Dietic$ OR occupational therap$ OR physiotherap$ OR speech and language therap$ OR speech & language therap$ OR $optic$ OR Technician OR Radiograph$ OR Psycholog$ OR Pharmac$ OR Assistant practitioner$ OR Healthcare assistant$ OR Advanced practitioner$ OR Allied health profession$ OR Healthcare profession$ OR Health profession$ OR Care practitioner$

Appendix B: List of included papers

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
1	2019	Open University	Breaking barriers to nursing	Quantitative Survey (n = 1000)	UK	Young people aged 18–24 who considered nursing (74 currently registered nurses and 236 currently studying)	Identified the main barriers to the nursing profession, which are key factors contributing to the UK's shortage of nurses.	• Cost • Working hours • Perceived pressure • Travel • Entry requirements • Third party advice • Altruism
2	2017	Rizzolo D, Leonard DR, Massey SL	Factors that Influence a Physician Assistant/ Associate Student Career Choice: An Exploratory Study of Students from the United States and United Kingdom	Quantitative Survey (n = 113, of which 52 from UK)	England (and USA)	Physician Associate students	This pilot study sought to understand why individuals decided to enter PA school along with analysing the results between a PA programme in the US compared with a program in the UK. Flexibility and ability to change specialty are primary reasons why students choose to become PAs.	• Attributes associated with professional life/ options

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
3	2016	Sayer L, Barriball KL, Bliss J	An innovative strategy to increase a professional workforce : the fast track initiative for health visitors in England	Mixed methods – Survey (n=71 students), semi-structured interviews (n=37 students), telephone interviews (n=13 managers) and six focus groups (n=24 practice teachers)	England	Health visitor students, managers and practice teachers	Career progression and interest in health promotion are key motivators for choosing health visiting as a career through FT initiatives. Exposure to the role biggest determinant to choose HV as a career in general	• Perception of career progression and interest in health promotion (key motivators) • The role of the health visitor as health promoter • Perception that health visiting offers the potential to put 'policy into practice' more directly than other roles for nurses and midwives, as well as the potential to 'make a difference' in the lives of the local community • Exposure to the role
4	2015	Norman KM	The image of community nursing: implications for future student nurse recruitment	Qualitative Interviews (n=40)	England	Year 11 pupils (age 15–16)	e.g. • Stereotypical image of nursing as being kind and caring, working in hospital as doctor's assistant • seen 'only' to care, less intellectually able or academic; traditional images of a vocational role with little autonomy or progression opportunities; • unimpressive choice compared to medicine or law; last-resort career choice	• Stereotypical images • Media • Family influence

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
5	2015	Edward K, Warelow P, Hemingway S, Hercelinskyj G, Welch A, McAndrew S, Stephenson J	Motivations of nursing students regarding their educational preparation for mental health nursing in Australia and the United Kingdom: a survey evaluation	Quantitative [Survey (n= 395 responses) 2 UK and 4 Australian Schools of Nursing within Universities]	England (and Australia)	Current student nurses (commenting, in part, on motivations before joining training)	e.g. "widely accepted that nursing as a career is viewed favourably by society in that it is perceived as offering job security, mobility and career variety. While the same cannot be said for particular speciality streams of nursing, such as mental health nursing." A personal experience of mental health (such as a relative with a mental illness or experience in working with people who experience mental illness) enhanced student motivation for opting for a career in mental health nursing.	• Personal experience and/or work experience/ exposure to mental health care. • Altruistic desire
6	2014	Genders and Brown	Who chooses to be a nurse, and why	Qualitative Interviews (n=20)	England	Learning disability nurses across 9 counties	Insights into career pathways and illustrates sometimes complex choices around becoming a learning disability nurse, points when decision made and influence of others. Sometimes interest in nursing formed in childhood, but entering learning disability nursing happens later/more haphazard.	• Influence of family, friends and tutors • Experience of working with people with learning disabilities • Time in their life when they made the decision • Major life events

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
7	2014	Beattie M, Smith A, Richard GK	Sadness, socialisation and shifted perceptions: School pupils' stories of a pre-nursing scholarship	Qualitative Focus groups x2 (n = 22)	Scotland (Two university campuses)	School pupils (female, aged 15–18), n = 22	A pre-nursing scholarship helped secondary school pupils to decide whether to pursue a nursing career by providing an opportunity to explore their ability, suitability and desire for nursing. Perceptions of the life and work of a (student) nurse, their future career, and the lives of older adults, shifted through the scholarship, especially during practice learning experience.	• 'Life stories' • Opportunities for pre-nursing experience (including practical learning experience)
8	2013	Litosseliti L, Leadbeater C.	Speech and language therapy/pathology: Perspectives on a gendered profession	Qualitative Interviews and questionnaire (n=32)/focus groups x6	England	Newly qualified, practising SLT graduates, undergraduate SLTs, SLTs, teachers of SLT and careers advisors	e.g. • General lack of awareness/knowledge about SLT among young people • Exposure to SLT common influencing factor • Perceived prestige and status of the profession and the salary it attracts	• Exposure to SLT • Influence of parents and relatives • Perceived status and prestige of profession • People's personal motivations and interests
9	2013	Latham J, Morris-Thompson T, Plata R.	Role of careers advisers in nurse recruitment. Nursing Management – UK	Qualitative Focus groups x 4 (n=30)	England	Careers advisers	e.g. • Perceived by some as a well-respected rewarding career with progression, security and good starting salary, but low-paid, female-dominated, vocational, unsociable hours and stressful • Media influence generally negative	• Media • Career advisers • Qualification

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
10	2013	Neilson GR, McNally J	The negative influence of significant others on high academic achieving school pupils' choice of nursing as a career	Qualitative Interviews (n = 20)	Scotland	School students (20 high academic achieving fourth and sixth year school pupils (paradigmatic cases from a survey of n=1062) who had considered nursing as possible career choice within their career preference cluster, but then choose either medicine or another health profession)	Explores why high academic achieving 5th and 6th year school pupils in considered nursing as a possible career choice within their career preference cluster, but then later disregarded nursing and decided to pursue medicine or another health care profession. Data revealed the negative influence of significant others (parents, guardians, guidance teachers and career advisors) on high academic achieving school pupils' choice of nursing as a career.	• Career advice and guidance • Careers advisers
11	2011	Neilson and Jones	What predicts the selection of nursing as a career choice in 5th and 6th year school students?	Cross-sectional descriptive survey Survey (n=1059)	Scotland	5th and 6th year school students from 11 schools in one education authority in Scotland	Students are more likely to choose nursing as a career if they are female, have comparatively poor performance at higher examination level, have a positive attitude to nursing as a degree subject and perceive that their career guidance teacher shares their positive view of nursing.	• Significant others (parents, careers advisers, guidance teachers) • Academic performance • Gender • Attitude to nursing as a degree

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
12	2011	Ali PA, Watson R	The case for graduate entry to the United Kingdom nursing register	Qualitative Literature review	UK	Potential nursing students (public)	Nursing as a profession still suffers from a poor image in the public eye.	• A lack of knowledge about the extended roles and responsibilities • The image of nurses portrayed by the media • More attractive alternative career choices • Negative stereotypes (views of gender, relationship to doctors, lower academic standards, limited career prospects/remuneration)
13	2011	Morris-Thompson T, Shepherd J, Plata R	Diversity, fulfilment and privilege: the image of nursing	Qualitative Focus groups and interviews	England	Mixed (Practising nurses, careers advisers, journalises, doctors, 'mature career switchers, graduates, parents, school children at GCSE level, children aged 7–17)	The public image of nursing does not reflect image that nurses have of themselves. The public appear ill-informed of what nurses do, purporting to respect nursing but would not recommend nursing as a career choice for themselves, their children or their pupils.	• Societal understanding of nursing role and perception of nursing as a career
14	2010	Dunnion M, Dunnion G and McBride M	Do I want to be a nurse? What influences students to undertake a BSc in nursing programme: a preliminary study	Quantitative Survey (n = 78)	Ireland	Students who had registered to commence an undergraduate BSc in Nursing course at one third-level college in the Republic of Ireland – includes three disciplines of general, mental health and intellectual disability nursing	The main reason to apply for a career in nursing was wanting to help and care for people.	• Recruitment campaigns need to be well-advertised, tailored to fit the needs of potential applicants and exploit the motivations people give for wanting to be a nurse.

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
15	2010a	McLaughlin K, Moutray M and Moore C	Career motivation in nursing students and the perceived influence of significant others	Qualitative Analysis of essays (68)	Northern Ireland	Undergraduate adult nursing students in their second year	Two key categories of influence: (1) past, present and future including personal experience, desire for development and altruism and (2) influence of significant others including family, friends, teachers and role models. Desire for professional development is just as important as desire to care.	• Previous experiences • Exposure to healthcare-related work • Timing/age/previous career • Desire to care/personal/self-development/altruism • Role of family and others including teachers and role models
16	2010b	McLaughlin K, Muldoon OT, Moutray M	Gender, gender roles and completion of nursing education: a longitudinal study	Quantitative Questionnaire (n = 384)	UK	Student nurses reflecting on attitudes before they started training	This was a longitudinal study which examined how gender, gender role identity and views of nursing careers assessed at the beginning of a nursing course. Gender bias inherent in nursing education causes attrition of male students. Male students more likely to leave the course than female students.	• Gender bias in nursing as a career. Perception shaped before being school but nursing education strengthens bias.
17	2010	Neilson GR	Not choosing nursing: work experience and career choice of high academic achieving school leavers	Qualitative Interviews (n = 20)	Scotland	School students (20 high academic achieving fourth and sixth year school pupils (paradigmatic cases from a survey of n=1062) who had considered nursing as possible career choice within their career preference cluster, but then chose either medicine or another health profession)	The high academic achieving pupils thought that work experience in nursing could be influential in making nursing more attractive as a career choice but identified several barriers including difficulty obtaining work experience, lack of input by nursing departments and views of 'inauthentic' work experience.	• Work experience (authentic exposure to role) • Teacher's attitudes towards nursing • Input of nursing departments in university into organising work placements.

#	Date	Author	Title	Method	Country	Population/sample	Summary of relevant findings	Determinant(s)
18	2010	Morris V	Nursing and nurses: the image and the reality	Mixed methods (national project, multimethod) Literature review, Focus groups, interviews, Delphi study	England	Various. Nurses, public, ward managers, etc.	Nursing perception in society and overall pride and view of nursing among nurses themselves affect how image of nursing is promoted.	• Profile of nurses in society • Perception of nursing role
19	2009	RCN survey, referenced in Mooney H, Ford S	Widen recruitment net to avoid crisis.	Quantitative Survey (n = 8,600)	England	17-year olds	Only one in 20 thought nursing was the right career for them, despite 'helping people' being one of the most important factors in choosing a career. The RCN found that police officers, teachers, doctors and firefighters were seen as more preferable public sector jobs than nursing	• Perception of tasks and value of nursing role in society
20	2009	Price, V.	Becoming a nurse: a meta study of early professional socialization and career choice in nursing	Qualitative Literature review of qualitative studies	Global (not specified)	Various, nurses, nursing students (no specific exclusion/inclusion criteria)	Career choice and early professional socialization are influenced by multiple factors, including early experiences, such as interactions with nurses and healthcare settings. Importance of the role of mentors, peers and role models in the formulation of career expectations, and career choice decisions.	• Early experiences • Role of mentors, peers and role models

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