Understanding the current evidence base on workforce retention in Health and Social Care

A rapid evidence review for
The Health Foundation

Laura Barrett, Elaine Robinson,
Research Matters
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**Executive summary**

The Health Foundation commissioned Research Matters to conduct a rapid evidence review to understand the current literature exploring retention in the health and social care workforce. The aim of the work was to provide a broad overview of the current evidence base, identifying areas where evidence is sparse or lacking. The findings were intended to support the development of grant awards by the Health Foundation in an Efficiency Research Programme focusing on labour productivity and workforce retention.

The review set out to identify a sample of studies and research with concrete and measurable findings about retention, in terms of factors influencing retention, the impact of variations in retention, and the effectiveness of relevant interventions. It included studies focusing on the UK from the last ten years (2008 onwards) and covered academic studies, policy-focused reports and some grey literature. The methodology combined database searching, following up citations, looking at recommended studies/authors and targeted desk research. The approach was time-limited and pragmatic and has resulted in a solid cross-section of the likely evidence base on retention.

**Profile of retention research**

In a short time, we identified a reasonable base of evidence with measurable findings about retention. Most of the studies we found were academic studies published in peer-reviewed journals or published directly by relevant academic centres. This included an ongoing National Institute for Health Research (NIHR) funded research programme focusing on GP retention. Some of the identified research was commissioned to support national retention strategies or by other key employer stakeholders, whilst a number of policy reports also included relevant evidence.

Studies identified were mostly based on primary research, predominantly using quantitative or mixed methods and drawing on survey data which reflected the views and experiences of individuals. We saw some good examples of the use of secondary data as part of a study methodology, but overall this was not a strong feature of the studies seen. This included limited use of data from national datasets covering health care workforces, although we observed that social care data (NMDS-SC) was used more strategically to conduct relevant research.

Amongst the evidence reviews we saw, including a number of systematic reviews, the lack of recent and robust UK-focused studies reflected was notable.

Although not always generalisable, trust-level case studies provided compelling evidence about interventions to address retention. These case studies often included a measurable impact on turnover or retention, because they were conducted in a single or localised setting.

We found two evaluations of interventions to address retention issues, one each in health and in social care, both of which were found to be effective. Both were based on surveys, but the latter was strengthened by being able to benchmark results against a national data set to establish a return on investment.
Studies in our review focused mainly on health care, although, there was a coherent body of work led by Skills for Care on social care. Within health care, a heavy focus on nursing and a number of trust-level case studies meant that secondary care was the predominant focus of studies, but primary care was well represented by studies focusing on GPs.

The majority of the research we saw focused on nurses and to a lesser extent, GPs and staff across social care settings. A small group of related studies looked at allied health professionals, with other individual studies on emergency care doctors, personal assistants, health care assistants and support workers, dental technicians and paramedics. Studies were weighted towards professional roles, but lower paid roles were covered, with differing issues highlighted. The newly qualified workforce were the group mostly like to covered by research, and to a lesser extent, those near retirement.

In terms of the level at which the research was conducted, most primary research described the situation at a national level, with examples from practice reporting at trust level.

The majority of the studies we saw diagnosed and evidenced the determinants of retention. These were framed as reasons for leaving, risk factors for retention or levers for improvement, and in a handful of studies, reasons for staying. A number of studies focused on what indicators could predict retention, including job satisfaction, intention to leave and the interplay between these. Studies looking at determinants relied heavily on reporting results directly, with limited further analysis of results. There were also a number of evidence reviews which presented findings thematically.

Across the studies we saw on determinants, there was a cluster addressing the linked and multidimensional determinants of working conditions, stress and burnout, flexible working and job dissatisfaction. There was also a focus on pay, with mixed evidence about its importance as a determinant. One external determinant described was competition from other sectors with segments of the health care workforce (i.e. catering, retail, tourism), but this was also highlighted as an opportunity to learn, particularly about flexible working.

What was conveyed most strongly was the complex interplay of determinants, with no silver bullet, only a consensus that retention decisions are multifactorial and cumulative, described in one study about GPs as ‘boiling the frog syndrome.’

Although studies frequently described the features of ‘good retention’ or showcased good practices, we only saw a few that evaluated strategies to address retention. As indicated, this included two evaluations of effective interventions. A number of trust-level case studies showcased successful strategies, including a toolkit tackling retention of doctors in emergency care which has been assessed and scaled up for national roll-out. There were also groups of studies that highlighted the effectiveness of recruiting for retention (values-based recruitment and retention, testing for stress, setting expectations), introducing and supporting flexible working and interventions targeting key groups (new starters and older workers), as well as studies which emphasised the value of monitoring local retention levels to inform strategies.

The impact of variations in retention were frequently discussed, but we found few studies where quantifiable links between retention and an impact on performance or patient outcomes could be
established. The clearest example of a system-level impact was from the Care Quality Commission (CQC), which found a statistical relationship between staff turnover and outcomes, in terms of notifications of death.\(^7\) A small number of positive impacts on quality of care and staff performance were evidenced using feedback from survey data in the social care sector. There were also a number of studies using extrapolated data, including the assertion by Health Education England (HEE) that maintaining 2012 retention levels would have resulted in 16,000 more nurses now.\(^8\) Studies gauging the impact of specific determinants and specific interventions were seen, but these were scant.

A few gaps or areas for further study were identified in the context of specific studies. This included calls for better workforce data and methods to assess retention, a stronger case to be made for retention and unsurprisingly, more work on retention of specific staff groups.

**In summary**

This rapid evidence review identified a solid, cross-sectional sample of research about retention, allowing for some meaningful observations about the approaches used and where there are gaps:

- Studies were mainly primary research, using quantitative and mixed methods approaches in equal measure, as well as evidence reviews providing diagnostic and thematic evidence about retention.
- Routinely collected NHS workforce data was under-used in academic research, but when it was used, could effectively demonstrate the impact of retention.
- There is an opportunity to learn from Skills for Care, which draws on a national data set to conduct relevant research and evaluate strategies at a sector level.
- There appears to be a lack of sufficiently robust and relevant UK research to meet criteria of systematic reviews.
- Studies are weighted towards a few key areas, leaving many areas not covered:
  - Nurses and GPs NOT multitude of other staff groups;
  - Determinants NOT impact of retention on patient outcomes and performance OR the effectiveness of interventions;
  - Perspectives on what pushes people away from roles or positions NOT what could persuade them to stay;
  - A less polarised sector perspective, but still under-representing community, public and mental health, and to some extent primary care.

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Introduction

Retention in the NHS

Retention is a current and complex workforce issue facing the NHS, with Health Education England (HEE) CEO, Ian Cumming, citing retention as the biggest single challenge in tackling NHS workforce shortages. To demonstrate the scale of the problem, we can draw on a variety of data and reporting, all reinforcing the same overall narrative of increases in staff leaving or poor rates of retention at a system and organisational level. To highlight a few:

- One in ten clinical staff leave the NHS every year; 10
- There is an upward trend in the level of nurse turnover, with:
  - Nurses leaving the NHS for reasons other than retirement increasing from 7.1% in 2011/12 to 8.7% in 2016/17, with further anticipated rises through to 2021; 8
  - Nurses leaving the profession increased from 3.6% in 2012/13 to 5% in 2016/17; 11
  - Nurses moving between NHS organisations also increased, from 12.3% in 2012-13 to 15% in 2016/17; 8
- In adult social care, average turnover rates have increased by 5% since 2012/13 and reaching 27% in 2016/7. 12

Most of this data focuses on nursing. It seems that headline data showing longer term levels of retention amongst GPs are less evident, in part, due to recent changes to the way GP statistics are gathered. However, the data that is available appears to show falling numbers, with a 4.5% decrease in overall GP numbers in the two years to December 2017, 13 reflecting difficulties with both retention and recruitment.

Significant variation across the health system is also apparent. The Health Foundation report, Rising Pressure: The NHS workforce challenge, found huge variation in stability and turnover rates between NHS organisations. The leaver rate in NHS trusts in England varied from less than 10% to more than 30%, with some trusts “running hard to stand still” as they continually seek to replace leavers throughout the year. 14

A number of national workforce strategies are in place or being developed. These include a comprehensive workforce retention programme, led by NHS Improvement in collaboration with NHS Employers and NHS England. In addition, a draft workforce strategy by HEE is being finalised in summer 2018, targeting priority areas laid out in The Five Year Forward View (cancer, mental health, maternity, primary and community care and urgent and emergency care). Retention schemes targeting GPs are also in place and at a local level we have noted a myriad of trust-level interventions and strategies, as well as examples of good practices from employers in the social care sector.

In the Carter review, potential savings of £2 billion from optimising NHS staff resources were identified. 15 Health Education England has estimated that maintaining 2012 nurse retention through to 2017 would have resulted in 16,000 more nurses working in the NHS today, which is almost half of current vacancies. 8
About this rapid evidence review

The Health Foundation commissioned Research Matters to conduct a rapid evidence review to understand the current literature exploring retention in the health and social care workforces. The aim of the work was to provide a broad overview of the current evidence base, identifying areas where evidence is sparse or lacking. A further aim was to understand how national data sets were being used in published research. The findings supported a new round of an Efficiency Research Programme focusing on labour market productivity and workforce retention within health and social care.

In this report, we present a high level profile of the current evidence base on retention, reaching back to 2008 to ensure we have sufficiently long-term view. We describe the different approaches and study methodologies and consider where studies are focused in terms of sectors, staff groups and geographic focus. We summarise the main findings seen in research about retention and highlight where gaps and areas for further research have been identified. Finally, we outline our high-level conclusions to frame ongoing research about retention in the health and social care workforce.

The report was for internal use by the Health Foundation and is published by Research Matters with the permission of the Health Foundation.
Methodology

A pragmatic approach was taken to fulfill the aim of identifying a solid cross-section of the evidence base exploring retention in the UK health and social care workforces. It was not intended to be comprehensive or meet the academic standards of a systematic review.

We looked for studies and reports which included a qualitative or quantitative exploration of factors influencing retention, the impact of variations in retention, and the effectiveness of relevant interventions. We also included the most relevant internationally focused systematic reviews, separately capturing any UK-based/published evidence included in them. We avoided studies where retention was a contextual issue or where an effect on retention was a potential by-product of a study. We did not include reporting of retention levels or commentary.

The focus was on evidence of experiences in the UK, published in the last ten years (2008 onwards).

Evidence was drawn from sources that included peer-reviewed, academic journals, policy and stakeholder reports and some grey literature. As well as qualitative and quantitative data and evidence, studies included observations, submitted evidence, extrapolated data and a significant number of case studies.

The methodology combined the following search strategies:

1. A structured search of published literature conducted by the University of Birmingham, covering key medical databases, including Medline, CINAHL (Cumulative Index of Nursing and Allied Health Literature), Web of Science, ASSIA (Applied Social Sciences Index & Abstracts) and Social Policy & Practice. Searches combined relevant search terms and searched abstracts of articles. This identified almost 500 studies, with around 40 of these meeting the inclusion criteria.
2. Additional targeted searches were conducted in Medline, NHS Evidence and Google Scholar, the British Medical Journal.
3. Studies were suggested by a number of Health Foundation experts and relevant specialists.
4. Broader desk research identified evidence published by key stakeholders, NHS organisations and health care think tanks.
5. A reference scan of papers provided further sources of evidence and was a useful check on the robustness of the developing evidence base.

Full texts of reports and studies were obtained and viewed for the majority of studies, but sometimes it was judged that the abstract provided sufficient information. Studies and reports meeting the relevant criteria were captured and categorised in a spreadsheet, enabling further analysis. The approach taken allowed us to identify a reasonable base of evidence with measurable findings about retention.
Profile of research identified

Most of the studies we identified were academic studies published in peer-reviewed journals focusing on a specific aspect of retention. A number were published directly by academic centres, including the Centre for Workforce Intelligence, Social Care Workforce Research Unit and Policy Research Units. Three studies were conducted under the remit of the NIHR, including two through NIHR Policy Research Units for Commissioning and the health care System, and a current NIHR funded research programme focusing on GP retention.¹

Some research has been instigated by key health and social care stakeholders, to inform policy development ¹⁶,¹⁷ or to directly support organisation/employer-level retention strategies.⁵,¹⁸–²⁰ A further group of studies examined broader workforce issues, and in doing so, reflected relevant evidence about retention, including a National Audit Office (NAO) report on the supply of clinical staff in the NHS¹⁰ and a House of Commons Health Select Committee report on the nursing workforce.¹¹ Other NHS policy reports reflected views and evidence about retention, including the Cavendish Review²² and the Carter review.¹⁵

Amongst health care think tanks there appeared to be less focus on retention, although there is an interesting 2012 study commissioned by The King’s Fund which looked at the effect of staff engagement on various outcomes, including staff turnover.⁴

Approaches to researching retention

In this rapid evidence review, we characterised the studies and evidence identified into several broad types of research:

- Around half of evidence identified were peer-reviewed, primary research studies. They were mostly quantitative or mixed methods studies, with slightly fewer qualitative studies.
- There were a few strong examples of research which used secondary data, including national workforce data sets.
- There were several evidence reviews, but these tended not include relevant UK studies.
- There was a group of trust-level case studies highlighting different responses and approaches to retention, including the impact of retention interventions and strategies.
- We saw two examples of evaluations of interventions addressing retention (GP retainer scheme and values-based recruitment and retention).

Primary research studies

Around half of the studies identified were based on primary research. Study design was evenly balanced between quantitative and mixed methods, with slightly fewer qualitative studies. This incorporated a range of approaches to sampling, with cross-sectional samples being most common, and wide ranges in sample sizes.

Amongst the quantitative studies, there was a mix of studies reporting survey results and studies conducting further analysis of results, including regression analysis, correlation, factor analysis and scenario modelling. Two of these studies linked surveys with standardised tools for measuring health or stress.²³,²⁴
Most studies seemed to report on cross-sectional data at a single point in time, but a few had a longitudinal element. This facilitated a focus on which indicators could predict retention, including job satisfaction and intention to leave and the complex interplay between these.\textsuperscript{23,25–28} Another longitudinal study examined reasons for staying, leaving or returning, which allowed for a contrast between the factors which ‘push’ staff away from the NHS, set against the external ‘pull’ factors.\textsuperscript{29}

**Use of national data sets**

There are two significant and evolving data sets, covering the health and social care workforces respectively. In part, an aim of this rapid evidence review was to establish how much these were being utilised in studies about retention. We found that use of this routinely collected data was fairly limited, except in the social care sector, where there data set is more established and is used to conduct relevant research and evaluate strategies addressing retention at a sector level.

The main source of national NHS data is the Workforce Minimum Data Set (wMDS), which extracts data from the Electronic Staff Records (ESR) of almost all of NHS trusts in England and Wales, and from other NHS providers. This is collected monthly and managed by NHS Digital. Turnover statistics collected include headcount of joiners and leavers (with different breakdowns (staff group, grade, occupation, employer, gender and nationality)), joiner and leaver rates and stability indices. Data showing categories of reasons for staff leaving the NHS are also published quarterly.\textsuperscript{30}

The wMDS is well established and has near comprehensive coverage of NHS organisations, with data collected in its current form since 2008. It’s use in academic studies is problematic because of issues accessing the data. As a result, few studies seen in this review were using the data to its full potential. Examples of studies which did use wMDS data include:

- A study which identified trends and retention rates across sub-groups of nurses by considering characteristics of their employment context;\textsuperscript{31}
- A study examining numbers of people leaving the NHS, where stress was a given reason. When combined with financial data, this gave estimates of the cost to the NHS;\textsuperscript{32}
- A trust-level case study which used ESR data to understand high turnover rates for new employees and developed effective interventions to address this.\textsuperscript{33}

We also noted that NHS Improvement had identified poor performing Trusts in terms of nurse turnover as part of current retention programme, which we assume had been possible using wMDS data and analysis.

For the social care workforce, Skills for Care maintains the National Minimum Data Set for Social Care (NMDS-SC), an online workforce data collection system that has been gathering information about social care providers and their staff for ten years. It includes data on proportion of directly employed staff who left their role (turnover rate), reasons for leaving, destination of leaver and vacancy rates.\textsuperscript{12}

NMDS-SC is widely recognised as a useful resource for data analysis and evaluating progress, although with a few caveats. It is drawn from a non-mandatory return, so coverage is not complete (56% of CQC regulated establishments in 2017). Coverage also varies by care services, job role and geographical area. However, the returns provide a robust sample of the workforce and enable useful sector level analysis.

As a result, the Skills for Care annual social care workforce report provides a consistent long-term view of retention within social care,\textsuperscript{12} but we also saw studies using the NMDS-SC in other ways, including:
A study which used a targeted sample of the top 10% of employers for retention (based on low vacancy turnover rates). The sample was then surveyed to identify what contributed to successful retention.\textsuperscript{20}

An evaluation of an intervention which used the NMDS-SC to establish a baseline to measure effectiveness, including comparing turnover for employers using the intervention against those who didn’t and estimating the resulting return on investment for organisations;\textsuperscript{4}

Analysis by the CQC which demonstrated a link between staff turnover and death notifications at a provider level, showing a statistically significant correlation between the two.\textsuperscript{7}

We saw a few other uses of secondary data sources. A study commissioned by the Kings Fund compared data on staff engagement from the NHS Staff Survey with other outcome measures, including turnover, and was able to show that staff engagement can have a positive impact on turnover.\textsuperscript{4} However, we noted that the NHS Staff Survey no longer includes questions on staff intentions to leave, so using the survey in this way is no longer possible.

Secondary data sources were also used in small number of studies looking at GP retention. In one study, GPs were tracked, via their GMC registration number, through successive Annual Censuses of Physicians (now the General and Personal Medical Services data) to see if intention to leave was a predictor of actually leaving.\textsuperscript{25} The GP Worklife Survey provided a consistent series on GP job satisfaction, stressors, hours of work and intentions to quit,\textsuperscript{21} whilst we saw the GP National Performers List used to draw survey samples.\textsuperscript{34,35}

At a local level, NHS trusts were seen to be utilising ESR data and also combining this with local data. We noted that NHS Employers has suggested a checklist of data sources to monitor retention that could include: staff turnover and stability rates, NHS Staff Survey, locally designed surveys, workforce information from ESR, exit surveys and conversations with existing staff.\textsuperscript{19}

Evidence reviews
We saw many systematic reviews and evidence reviews addressing retention at an international level, but found that typically, these reviews drew on few, if any, relevant or up-to-date UK studies. However, the implications from these evidence reviews are frequently applied to the UK context and used to make recommendations about current retention issues in the UK. An example is a 2014 literature review conducted by HEE on why nurses are leaving the NHS: this drew relevant conclusions, but most studies covered did not reflect UK experience.\textsuperscript{18}

Several key systematic reviews were included in this review, despite the lack of UK evidence. A number concluded that evidence on retention was not sufficiently robust, reporting that the small number of studies with greater than moderate evidence strength makes it difficult to draw strong conclusions or recommendations.\textsuperscript{36,37} One aspect noted was the methodological challenges associated with measuring and comparing turnover, including gaps in record keeping and differing definitions. Some studies record turnover as any job move while others record it as leaving the organisation or the profession. Others differ in the way voluntary and involuntary turnover is treated.\textsuperscript{18,37}

Trust-level case studies
Trust-level case studies presented evidence about the effects of targeted interventions and strategies to address retention. NHS Employers has published a guide presenting the best examples from 92 implementation projects, some of which can evidence direct impact on retention.\textsuperscript{19} This included one frequently cited and strong case study from Buckinghamshire Healthcare NHS Trust,
which achieved a 2% improvement in staff turnover through developing a tailored, local retention strategy. However, this publication only profiled interventions that were judged to be effective and did not compare strategies or draw out what has not worked.

Case studies and cited examples were more likely to show a quantifiable impact on turnover or retention, because they can draw on available internal data and research at an organisational level. These successful examples reinforce the frequently articulated need for organisations to collect and monitor local data and feedback to inform local responses and strategies.

Collectively, case studies presented a varied picture and showed clearly that retention issues and strategies are strongly influenced by local determinants and context, which can present difficulties when generalising their effect at a system level. They also lacked some of the rigour of primary research methods. Despite these issues, the clear impact and accessibility of trust-level case studies mean that they are widely used and compelling source of evidence on retention.

Evaluations of interventions

We saw two examples of full evaluations of interventions which address retention, both of which were shown to be effective. A 2014 evaluation of the GP Retainer Scheme was based on an online survey and follow-up interviews with GPs. The Skills for Care evaluation of values-based recruitment and retention was also based on a commissioned survey, but was able to link this to key business performance indicators from the NMDS-SC such as staff retention, absence and performance measures and furthermore establish a return on investment (i.e. for every £1 spent on a values based approach to recruitment and retention, there is a return of £1.23 in cost savings).

Focus of studies on retention

Studies looked predominantly at the health care segment, although as discussed, there was a coherent body of work led by Skills for Care on social care. Within health care, a heavy concentration on nursing and a number of trust-level case studies meant that secondary care was the overwhelming focus of most studies. Primary care was well represented by studies focusing on GPs, but less so for other roles. There were few studies reflecting retention issues in the community care and mental health sectors.

As indicated, over half the studies seen in this review focused wholly or partially on nurses, including several substantive systematic reviews, a large scale project commissioned by Health Education South London, a dedicated House of Commons Select Committee report, and a project by Buckinghamshire Healthcare NHS Trust. In addition, a group of academic studies looked at specific aspects of nurse retention, such as stress, CPD and leadership practices. As well as looking at nursing profession as a whole, there were studies that concentrated on specific groups such as community nurses over 50, adult nurses, or neonatal nurses. We did not see specific research on midwives and health visitors, although they were included in a study which modelled the future supply of nursing staff.

After nurses, the most studied staff group seen was general practitioners (GPs), with the success of the GP Retainer Scheme specifically evaluated. We saw several systematic reviews, but these were not conclusive and contained few in-scope UK studies. This was reinforced in the conclusions of one recent systematic review, commissioned by the Department of Health to support the GP Ten Point Plan: ‘Overall, the published evidence in relation to GP recruitment and retention is limited.’

Other work included a group of studies surveying GPs about intentions to leave the profession and the GP Worklife Survey, which is a three-yearly survey asking about career intentions.
and job satisfaction, amongst other things. Finally, a current NIHR-funded research programme, based at the University of Exeter Medical School, aims to gain insight into the problems of GPs leaving direct patient care through retirement or taking a career break, and to help to develop strategies and policies to maintain the GP workforce.

A small group of related studies looked at allied health professionals, with one focusing on speech and language therapists. Other staff groups covered in individual studies include emergency care doctors, personal assistants, health care assistants and support workers, dental technicians and paramedics.

Whilst the majority of studies focused on the experiences of professional staff groups, those in the social care sector reflected some of the contrasting retention issues facing staff in lower paid and lower qualified roles, including competition with the NHS from other sectors, such as retail or tourism.

Specific groups with shared employee demographics were the focus of some studies, particularly in terms of career stage. The problem of high turnover in staff either at the beginning or end of their working lives was often identified and several studies investigated factors and strategies specific to these groups. Females emerged as more susceptible to retention issues in some studies, but this was generally not the focus of studies, although one study did consider gender differences in workforce participation. Most studies considered retention in terms of intentions to leave or leavers, with very few looking at factors influencing stayers.

Most research seen addressed retention at a national level, discussing issues that could impact across the country. There were two significant regionally focused projects: an HEE project examining nurse turnover and retention in South London; and the NIHR programme on GP retention which is based in the South West of England. A number of primary research studies targeted single sites or trusts, or specific settings for example intensive care, elderly and dementia care and a health care telephone advice centre. In trust-level case studies, the experiences and strategies of individual trusts or hospitals were showcased.

Also of note, was a whole body of international work examining issues of recruiting in rural locations, but this was not a theme reflected in the UK studies identified in this review.

**Findings about retention**

Clearly, retention is a wide-ranging and complex issue. There is a lot of commentary and reporting that paints a picture of retention in the NHS, in terms of levels and trends, with description and analysis of relevant issues. However, this particular rapid evidence review, was focused on understanding the research landscape.

In reflecting this, we found that studies covered three key areas to some degree, either exclusively or in combination. These were:

- **Determinants of retention**: these are the factors that influence decisions about retention and was the main focus of many of the studies seen, especially within studies using commissioned surveys and evidence reviews;
- **Interventions and strategies to address retention**: these are actions that address and improve retention, most frequently highlighted in trust-level case studies and sometimes evaluated in studies. There were examples of this, but as a whole, this was not a strong features of the studies identified;
• **Impact of variations in retention** on individuals, services, organisations or even the health care system. Studies might address the impact of a determinant of retention, the impact of a specific intervention, or they may address a system-level impact. In UK studies about retention, this evidence was hard to find, and was found almost as an aside rather than being the focus of research.

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**Determinants of retention**

The main emphasis across the studies identified was on diagnosing and evidencing the reasons behind variations in retention. These factors influencing retention, or ‘determinants,’ can be framed as reasons for leaving, risk factors for retention or levers for improvement. Results were most typically presented using thematic analysis and provided a useful and compelling narrative about the determinants of retention.

Most studies looked at a range of determinants, with a few studies focusing on one specific determinant. Some, but not all, attributed different levels of influence on retention or demonstrated that retention is a multifactorial problem. In other studies, types of determinant were grouped, for example, work-related, personal and economic. A small number of studies also included or alluded to reasons for staying, but this perspective was not well articulated.

The evidence seen presented a complex and cumulative picture of the determinants of retention, a conclusion reflected in a number of studies. One specifically reported that there are “interconnected factors that make a job/setting less attractive but it is the build-up of these on top of each other that push nurses from their posts.” In another study, which looked at determinants for GPs, multiple factors were again implicated, with the cumulative effect on GPs being described as “boiling frog syndrome.”

Across the studies identified, the strongest focus was on the linked and multidimensional determinants of working conditions, stress and burnout, flexible working and job dissatisfaction, with some additional focus on pay.

**Working conditions** emerged as an important theme across studies and professions. It encompassed many factors such as workload, stress levels, work-life balance, experiences and
practices at work, changing expectations, professional development and even whether there is a place for a cup of tea! Sometimes these factors were broken down and ranked or weighed against each other. A study of GPs intending to leave ranked influential factors as intensity of workload, volume of workload, time spent on unimportant tasks, a seven-day working week and job satisfaction.\textsuperscript{49} Another systematic review found that health care practitioners were incentivised by working environments (including professional development, improved work life balance, interprofessional collaboration, and professional autonomy), but less concerned with workload factors (job demand, staffing models, work designs, ward practices, employment status, or staff skill).\textsuperscript{64}

Lack of flexibility was also a reason for leaving.\textsuperscript{8,11,14,49} One study assessing stress in nurses identified work-family conflict as an underlying issue.\textsuperscript{23} Other studies about social care and mental health services described competition from other low paid sectors where working arrangements are more flexible.\textsuperscript{56–58} In a number of studies, there was a subsequent recommendation to learn from these sectors or companies operating in these sectors (such as Nando’s).\textsuperscript{57}

**Stress and burnout** were often cited as a factor for leaving, especially for nurses\textsuperscript{18,23,65} and GPs.\textsuperscript{5,16,35} One observational study identified a significant correlation between stress and burnout and intention to leave, with 42% of UK nurses reporting burnout (compared to a European average of 28%).\textsuperscript{66}

A number of studies showed **job dissatisfaction** as a strong determinant for leaving,\textsuperscript{16,18,25,26,31,38,40} but this concept was reflected in different ways across studies and was frequently bound with stress and burnout. A key HEE evidence review on nurses leaving practice describes job dissatisfaction as the ‘composite reason’ for nurses leaving, and evidenced a range of potential risk factors including: work overload, specific branches of nursing, lack of control/involvement in decision making, insufficient rewards and unfairness, absence of community, conflict in values and quality of care.\textsuperscript{18} Conversely, job satisfaction was sometimes seen to have a direct link with staying,\textsuperscript{16,29,38,63} but in other studies this link was less clear.\textsuperscript{25}

Studies varied in the importance ascribed to **pay**. It was variably: the only factor to have a direct effect on intentions;\textsuperscript{27} one of a number of relevant factors;\textsuperscript{12,16,37} more relevant in recruitment and the early stages of retention;\textsuperscript{64} and finally, unable to compensate for other sources of dissatisfaction.\textsuperscript{5} Pensions were a more relevant determinant for some, with studies on AHPs and nurses looking to pensions rather than pay as a reason for staying in the NHS.\textsuperscript{29,44} However, studies seemed to reflect a distinction between views of pay as a determinant, and the reality of actually using pay and financial incentives, although this was more evident in lower paid sectors than professional roles (see below).

We saw a number of studies which highlighted various **career** issues as relevant determinants, with data showing that employees at both ends of the career spectrum (new starters and older workers) were most vulnerable and had higher turnover rates. Lack of developmental opportunities was also cited as a reason for leaving or a positive influence on intentions to stay in a number of studies,\textsuperscript{20,49,64,67,68} although two studies found no evidence of a link between career development and retention.\textsuperscript{16,42} A couple of studies showed that the introduction and process of revalidation and appraisal processes were determinants for retention, with a high proportion of nurses\textsuperscript{11} and GPs\textsuperscript{50,51} citing these as reasons for leaving. Other determinants noted include leadership and management\textsuperscript{43,62} and organisations and culture.\textsuperscript{19,20,35,69}

It should be noted that there were a range of determinants that were understood to be outside the control of providers and policy makers. These were wide-ranging and included positive reasons for
leaving jobs (for more experience, career development, money, promotion), personal reasons, local market factors and national factors, such as Brexit.

Interventions and strategies that address retention

Within the studies seen, there was a body of research which described the **features of ‘good retention’**. This was more likely to be evidenced using qualitative methods, with open questions about what constitutes good retention,\(^{20,68}\) thematic analysis of interventions,\(^{19}\) and restating determinants as supportive actions or recommendations to improve retention. A number of trust-level case studies also showcased the features of a successful retention strategy at an organisational level.\(^{41}\)

There were studies showing a cluster of positive effects which underlined specific areas as having more potential to make a difference to retention. In part because they were backed by full evaluations, recruiting for retention and flexible working were the strongest of these.

A small group of studies highlighted the important role of **recruitment** of suitable candidates in retention strategies, focusing particularly on qualities that might predict higher retention. This was strongest in social care, where there was a focus on recruiting based on values (rather than qualifications) as a way to ensure staff are retained,\(^{20,22}\) as well as the positive evaluation of values-based recruitment and retention.\(^{3}\) A case study from York Hospital also reported reduced staff turnover (from 17% to 12%) when it introduced ‘recruiting for values’.\(^{22}\) One quantitative study found that pre-employment screening to identify staff with coping traits associated with low stress could help address retention problems,\(^{24}\) whilst another highlighted the importance of ensuring expectations about a role match the reality.\(^{16}\)

**Flexible working** was a thread in some studies and was seen to have a direct positive effect on retention in evidence reviews.\(^{64}\) The ability to work around childcare responsibilities, and to a lesser extent, to work whilst managing long-term health conditions, were cited as key reasons for joining the GP retainer scheme.\(^{2}\) Another, older intervention supporting flexible working, the Improving Working Lives initiative, was regarded by community nurses as improving retention.\(^{44}\)

A group of studies highlighted new starters and older workers as higher risk groups for retention. Recommendations for differentiated actions to support these groups were often based on flexible working models.\(^{18,28,46,62,70}\) In case studies, trust-level efforts were seen to effectively target over 50’s\(^{42}\) and new starters.\(^{33}\) In international reviews, preceptorships\(^{39}\) and mentoring\(^{59}\) were seen to have a positive impact on newly qualified nurses, but these did not seem to draw on UK studies.

Despite mixed views of **pay** as a determinant of retention seen in studies, it did seem to have more bearing as an intervention in the lower paid social care sector. A survey of top social care employers for retention reported that paying above minimum wage rates improved retention.\(^{20}\) This was reinforced by 2016 data from NMDS-SC, which showed that those paid more were less likely to leave their role.\(^{12}\) Other examples from social care highlighted examples of **financial incentives** for loyalty or performance, including gain-sharing collective benefits - noted as the first example of outcomes based commissioning in social care.\(^{56}\) The thematic review of 92 interventions by NHS Employers highlighted organisational reward as an intervention, along with pay and benefits, but did not evidence this.\(^{19}\)

We saw studies showing that actively **monitoring retention** had a positive impact, in terms of using the information to intervene in a more targeted way. This was seen in trust-level case studies which showed how data analysis and specific research can inform retention strategies to improve retention,\(^{19,33,41}\) whilst in a survey of nurse/HR managers some were using nurse leaver data and
feedback to inform retention strategies.\textsuperscript{37} We also saw that the act of monitoring was seen as an important signal of intent: in social care, 64\% of top employers for retention monitor staff satisfaction,\textsuperscript{20} whilst many stakeholders, including HEE and NHS Providers, make recommendations about monitoring of intentions to leave, staff turnover and other potential predictors of a retention, (e.g. stress, burnout, job satisfaction), as well as monitoring the impact of retention strategies.\textsuperscript{18,19}

There was less focus in the studies on the \textit{effectiveness of interventions}, an observation in line with one evidence review which reflected “\textit{that intervention studies are almost wholly lacking and we are unable to conclude that the strategies (in the guidance) will have impact."}\textsuperscript{31} Although, as indicated, we did see two evaluations of interventions.\textsuperscript{2,3}

\textbf{Impact of variations in retention}

In the UK studies reviewed, we saw few attempts to quantitatively link variations in retention to a subsequent impact on patient or performance outcomes.

A few studies extrapolated the potential \textbf{system-level} impact of variations in retention. Most notably, HEE refer widely to the assertion that if 2012 retention rates had been maintained, we would have had 16,000 more nurses in 2017, amounting to almost half of NHS vacancies.\textsuperscript{5} For HEE again, we saw a potential system-level cost saving which could result from the implementation of the SAS toolkit, as well as a more sustainable workforce for emergency departments.\textsuperscript{6}

However, only one study in our sample could establish a link with patient outcomes. This was from the CQC, which had established a statistical link between staff turnover and outcomes, in terms of notifications of death.\textsuperscript{7}

A few studies identified were able to draw out the broader system-level effects of variations in retention using qualitative evidence. In the social care sector, studies showed that staff continuity was important for high quality care,\textsuperscript{20} and that staff supported according to a ‘values based’ approach seemed to perform better and possess stronger care values.\textsuperscript{3} A study about retaining older primary and community nurses conveyed problems caused by loss of skills, experience and local knowledge when experienced nurses leave.\textsuperscript{44} Another qualitative study identified staff stability as barrier to implementing a policy initiative (integrated care pilots).\textsuperscript{71}

Only one study looked at the measurable \textbf{impact of a specific determinant}, making a quantifiable link between staff engagement and an effect on staff turnover, with lower rates in trusts with better engagement (approx. 0.6\%).\textsuperscript{4} One other recent study considered turnover driven by stress, including an estimate of the financial implications this factor.\textsuperscript{32}

Similarly, there is much less focus in the studies seen on demonstrating the \textbf{impact of a specific intervention}. The evaluations of the GP retainer scheme and values-based recruitment and retention both demonstrated a direct positive effect on retention levels.\textsuperscript{1,3} In the latter example, cost benefits were also extrapolated to highlight a potential positive return on investment. Case studies were more likely to provide evidence of the positive impact of improved retention at an organisational level.

More typically, depictions of the impact of variations in retention were descriptive or based on evidence that was not cited or published: many studies report or assert that poor retention has a negative impact, or conversely that good retention has a positive impact. For example, HEE reports that: “\textit{analysis suggests that organisations with higher staff retention have improved staff experience, better patient outcomes, higher productivity and reduced reliance on temporary staffing,}”\textsuperscript{36} but no evidence was given to support this. Other studies described various reported and
potential consequences resulting from staff turnover, including problems with continuity of care, recruitment and other costs, and impacts on standards of patient care and quality of services. More often, where studies did relay the impact of retention, it was likely to be based on international evidence.

Gaps identified within studies
Across the studies seen, a number of gaps or areas for further study were identified, most commonly calling for further research on specific staff groups or issues. A few themes emerged more strongly as clearer knowledge and data gaps.

A recurring theme was better access to health workforce data. We noted several calls for more transparency, including a 2016 National Audit Office report which concluded that: “There are significant gaps in the data that are needed to make well-informed decisions”. More recently, a Health Select Committee inquiry into the nursing workforce reflected that this gap was yet to be addressed, with NHS Providers’ pressing that “consistent data for nursing vacancy, retention and leaver rates at a local and national level are still widely unavailable.” The shortage of information about paramedic retention was also recognised in evidence from unions to the Ambulance Pay Review: “There is no national data set for reasons for leaving or exit interview data.”

A few key studies recognised the need for a sharper focus on understanding of the consequences of variations in retention and making the case for investing in retention. This gap was well articulated by a European-wide project on recruitment and retention of the health care workforce: “The case needs to be made to demonstrate that this is an investment that pays dividends in terms of reduced costs of turnover.... Improved recruitment and better retention means better access, which in turn means better health outcomes and savings on inappropriate service utilisation.”

There were calls for more a nuanced focus for research, such as looking at what motivated people to stay, rather than the usual focus on intentions to leave or leavers. It was also observed that understanding more clearly the causal relationship between job satisfaction, intentions to leave and actual leaving would help the development of retention interventions. The need for more work on why nurses leave the profession, as opposed to a specific job or place of work, was highlighted in a large international study, which also called for more longitudinal research, rather than just cross-sectional research, to build understanding of how retention issues evolve over time.
Key observations

This rapid evidence review identified a solid, cross-sectional sample of research about retention, allowing for some meaningful observations about the approaches used and where there are gaps.

We identified a multitude of primary research and evidence reviews, which taken together, provided useful diagnostic and thematic evidence about the issues driving retention. There was less use of quantitative analysis to demonstrate impact or effectiveness. There appears to be a lack of sufficiently robust and relevant UK research to meet criteria of systematic reviews.

Routinely collected NHS workforce data was under-used in academic research, but when it is used, can effectively demonstrate the impact of retention. There is an opportunity to learn from Skills for Care and the social care sector. They draw on an accessible, well-established and regarded data set to conduct relevant research and evaluate strategies at a sector level.

While there is clearly a substantial body of work that examines some of the issues around retention in the health and social care workforce, these were weighted towards a few key areas. It was recognised in many of the studies we saw that there are knowledge gaps and need for further research to inform policy, direct interventions and to measure their impact in terms of outcomes.

Nurses and to a less extent GPs, are the focus of the overwhelming majority of studies, with scant coverage of the multitude of other staff groups.

The key issues of the impact of retention on patient outcomes and performance or the effectiveness of interventions are much less prominent. And yet, when they are evidenced, or more likely extrapolated, they are powerful. This is set against well-evidenced, but ultimately inconclusive studies about the determinants of retention.

The perspective is on what pushes people away from roles or positions, rather on what could persuade them to stay. The sector perspective is less polarised: there is a stronger emphasis on secondary care, solid research on social care and to some extent primary care, but little focus on community, public and mental health.
References

1. Retaining the experienced GP workforce in direct patient care (ReGROUP): University of Exeter Business School, University of Bristol, Centre for Workforce Intelligence.


30. NHS Staff Turnover definitions. *NHS Digital*,


47. Harris M, Morison J, Main P. GP induction and refresher and retainer schemes: are they cost-effective? *Br J Gen Pract* 2014; 64: 46–47.

56. Moriarty J, Manthorpe J, Harris J. Recruitment and retention in adult social care services. Social Care Workforce Research Unit, King’s College London, 2018.
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